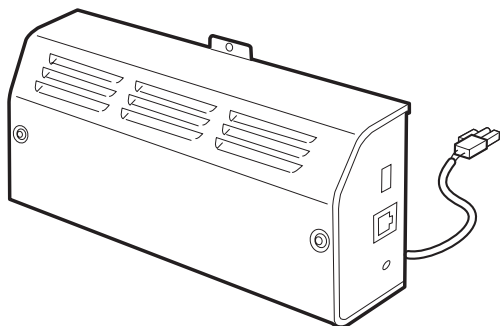


SHARP SERVICE MANUAL

CODE : 00ZARNB3//A1E



**DIGITAL COPIER/
PRINTER/MULTIFUNC-
TIONAL SYSTEM OPTION**

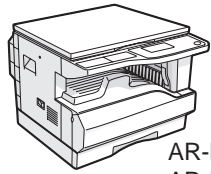
MODEL AR-NB3

CONTENTS

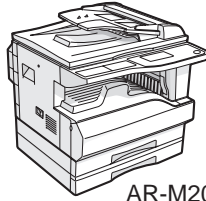
[1] CONFIGURATION	1 - 1
[2] SPECIFICATIONS	1 - 1
[3] UNPACKING AND INSTALLATION.....	3 - 1
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[8] PWB PARTS LAYOUT	8 - 1

Parts marked with "△" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

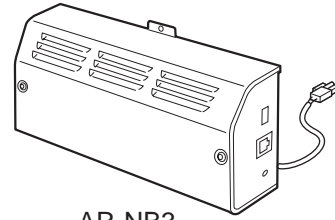
[1] CONFIGURATION



AR-M165 (for Europe)
AR-M162



AR-M207



AR-NB3

[2] SPECIFICATIONS

1. BASIC SPECIFICATIONS

Item	Content
Function	Supports the network printer (PCL6/PCL5e/PS3) and the network scanner.
Support models	ARM207/M162/M165(for Europe)
Standard memory	64MB
Expansion memory	1 slot (128MB or 256MB expansion memory (144pin SDRAM SODIMM) can be installed.)
Interface	10Base-T/100Base-TX network interface, USB port
LED	Power LED, 10/100BASE-TX mode LED, LAN status LED, USB status LED
Switch	Status switch
Client PC platform	IBM PC/AT compatible machine, Macintosh
Expansion font memory	PS font memory, Bar code font memory, Flash ROM kit (Additional fonts, Macro, etc.)
Support OS	Windows 95/98/Me/ NT4.0 (Work Station SP5 or later)/ 2000 Professional/ XP Home Edition/ XP Professional Edition/ Windows 2000 Server/ Windows Server 2003 Mac OS 8.6 ~ 9.x, 10.1-10.3.4 (with PS option)
Support hardware environment (PC)	System: The OS operating conditions must be basically satisfied. HDD: An empty capacity of 100MB or more is recommendable. Monitor: 800 x 600 dots(Interface)10BASE-T/ 100BASE-TX Ethernet
Expansion option	PS expansion kit (AR-PK1N) Bar code font kit (AR-PF1) Flash ROM kit (AR-PF2) Sharpdesk (Sharpdesk license kit AR-U series)
Network protocol	TCP/IP, IPX/SPX (NetWare), NetBEUI, EtherTalk (AppleTalk)
Emulation	PCL5e, PCL6, PS3 (PostScript 3) (*1)
Item	Content
Network print	PCL5e/PCL6/ PS3/ Win PPD/ Mac PPD

Item	Content
E-RIC	Cancel with the soft key.
Print speed (*2)	When the dual function board is installed: AR-M207: 20 pages/min, AR-M162: 16 pages/min When the dual function board is not installed: 12 pages/min
Resolution	600dpi/ 300dpi (*3)
Built-in font	PCL6/PCL5e: 80 kinds of European fonts, one kind of European bitmap font PostScript 3 compatible (*4): 136 kinds of European outline fonts.
Power source	Supplied by the main unit. (Power consumption: 5.5W)
External dimensions	248mm (W) x 127mm (D) x 59mm (H)

(*1) Available only if the PS3 expansion kit (AR-PK1N) is installed.

(*2) Print speed during printing of the second sheet and following sheets when using 8-1/2" x 11" (A4) plain paper and performing continuous one-sided printing of the same page; excluding use of offset output.

(*3) 300 dpi can only be selected when using the PCL6 or PCL5e printer driver.

(*4) For information on machine and dual function board memory, see the "Operation manual (for general information and copier)".

(*5) For the specifications of the scanner, refer to the descriptions of "B. Network Scanner Function."

2. FUNCTION DESCRIPTION

A. PRINT EMULATION

A difference exists in the function which can be used by execution of the basic performance and composition of the MFP to connect (print size/configuration).

(1) comparison table of main print function classified by driver

Function		PCL5e Custom Driver	PCL6 (XL) Custom Driver	PS Custom Driver	Macintosh PPD file	Windows PPD file
General	Document Style	1-Sided, 2-Sided(Book) 2-Sided(Tablet), Pamphlet Style(Tiled Pamphlet), Pamphlet Style(2-up Pamphlet)			1-Sided, 2-Sided(Book), 2-Sided(Tablet)	
	Booklet	Yes			No	
	Binding Edge	No				
	N-up	2/4/6/8/9/16	2/4/6/8/9/16		2/4/6/9/16	Win 9x : 2/4 Win2K/XP: 2/4/6/9/16
	N-up Order	Z	Z, Reverse Z, N, Reverse N			Z
	Custom Paper Size	1size				3 sizes
	Different 1st (Cover)	Yes				No
Graphic	Resolution Setting	600/300 dpi		600dpi		
	Halftone Setting	No		Yes	No	
	Graphics Mode	Raster/HP-GL2	Raster/Vector	No		
	Negative Image	No		Yes		
	Mirror Image	No		Yes		
	Fit to Page	Yes			No	
Font	Resident Font	80 fonts		136 fonts	35 fonts	136 fonts
	Download font	Yes			No	Yes
Others	Configura- tion Setting	Yes (Automatic)				No
	Job Compression	No		Yes	No	
	Bitmap Compression	No		Yes	No	

(2) Print functions of the drivers

Function			PCL5e	PCL6	PS	Windows PPD	Mac PPD
Frequently-used functions	Number of copies		1- 999				
	Print direction		○				
	N-up	Number of pages	2, 4, 6, 8, 9, 16			2, 4 (*1)	2, 4, 6, 9, 16
		Order	Selectable			Fixed	Selectable
		Border	Yes/No			Yes/No (*1)	Selectable
	Duplex print (*2)		○				
	Binding position (*2)		Horizontal binding / Vertical binding			Long side/ Short side	
	Center binding (*2)		○			× (*3)	×
Paper feed system	Paper size		○				
	Custom Paper Size		1size			3 sizes (*4)	1 size (*5)
	Source Selection		○				
	Output tray settings		○				
	Cover Settings		○			×	○

Function		PCL5e	PCL6	PS	Windows PPD	Mac PPD
Graphics	Resolution	600/ 300dpi		600dpi		
	Halftone	×		○	×	
	Graphics Mode	○		×		
	Zoom	×		○		
	Mirror Image	×		○		
	Negative Image	×		○		
	Fit To Page	○			×	
Font	Resident fonts	80 fonts		136 fonts	136 fonts	35 fonts
	Selectable download fonts	Bitmap, True Type, Graphics		Bitmap, Type 1, True Type		× (*7)
Other functions	Automatic configuration settings	○			×	○ (*8)
	ROPM (*9)	○				
	Overlay	○			×	
	Job Control	○			×	○ (*5)
	Watermark	○				
	Job Compression	×		○	×	
	Bitmap Compression	×		○	×	

(*1) N-up printing cannot be used in Windows NT 4.0. In Windows 2000/XP/Server 2003, 2, 4, 6, 9, and 16 N-up printing can be used.

(*2) Only for the model with the duplex print function.

(*3) For Windows 2000/ XP/ Server 2003, the center binding print can be made.

(*4) For Windows NT4.0, the custom paper setting cannot be made. For Windows 2000/ XP/ Server 2003, the custom paper setting can be made in one size.

(*5) Cannot be used in Mac OS X v10.1.5.

(*6) For Windows NT4.0, there are 35 built-in fonts available.

(*7) For some versions of LaserWriter, selection of Type 1 or True Type can be made.

(*8) Cannot be used in Mac OS X.

(*9) Can only be used when the dual function board is installed.

(3) PDF/TIFF direct printing function

PDF and TIFF files can be specified from a web page and directly printed out.

(4) Limitations (printing function)

If a print request for GDI/SPLC data is made, an error message is printed out.

(5) Printer condition setup

The following setup can be made from the web page.

Function	Item	Default
Number of copies	1 - 999	1
Standard paper source	Tray (auto/manual (auto)/ Trays 1 - 4)	Auto
Printing of blank paper is prohibited.	No	No
Duplex printing	One side/Both sides (long side/short side)	One side
ROPM	On/Off	On

(6) Network status page

The network status pages shows a list of settings about the network.

Data are printed out in the A4 or letter size in US English regardless of the destination and OS language selected.

The status page can be printed out by pressing the status switch on the network expansion kit.

Note:

1. The name of the printer is printed under the item "printer name."
2. When WINS is disabled, "WINS server 1-5" is not displayed. It is displayed when a value is set or information is acquired from the DHCP server.

Any server which responds normally to the registration of WINS is marked with an asterisk "*".

"WINS server" shows up to 5 values: 2 settings, 2 DHCP values, and broadcast. However, the broadcast operates only when no normal response is returned from any server.

3. The "WINS Scope ID" is displayed only when a value is set or when information is acquired from the DHCP server and more than one piece of information is valid as a WINS server.

B. NETWORK SCANNING FUNCTION

It is possible to use the MFP scanning function as a network scanner with a network scanner expansion kit.

Setups can be made using a Web browser.

Supported functions vary with the type of the MFP connected.

(1) Specifications

Type	Color scanner
Scanning resolution (Primary scanning x Secondary scanning)	75x75, 100x100, 150x150, 200x200, 300x300, 400x400, 600x600 dpi
Interface	LAN connection 10Base-T/100Base-TX
Network protocol	TCP/IP, SMTP, LDAP, FTP
Supported client PC operating systems	Windows 95, Windows 98, Windows Me, Windows NT Workstation 4.0 (Service Pack 5 or later), Windows 2000 Professional, Windows XP Home Edition, Windows XP Professional, Windows 2000 Server, Windows Server 2003
File formats	File types: PDF, TIFF, JPEG Compression modes: None, G3 (*1), G4 (*1), JPEG
Two-sided originals	Possible (*1)
Optical resolution	600dpi
File creation method	One file per each 1 to 6 pages/One file for all pages
Scan destinations	Scan to FTP Scan to Desktop Scan to E-mail
Management system	Uses built-in Web server
Recommended Web browser	Internet Explorer 5.5 or later (Windows)/5.1 or later (Macintosh), Netscape Navigator 6.0 or later
Supported mail system	Mail server that supports SMTP, mail server that supports POP3
Number of destinations	200 maximum (*2)
Utilities	Sharpdesk

(*1) : B/W only

(*2) : A total of 200 destinations can be stored, including E-mail, FTP, Desktop, and Group destinations. Among these, multiple e-mail addresses (up to 100) can be stored as a group. Note that this may reduce the maximum number of destinations (normally 200) that can be stored.

(2) Basic scanning function

Function	Item	AR-M207/M165/M162	Remarks
Network scanner	Scan to E-mail	Yes (when AR-EB9 is installed)	
	Scan to Desktop	Yes (when AR-EB9 is installed)	
	Scan to FTP server	Yes (when AR-EB9 is installed)	
Destination	Specify e-mail address with LDAP	Yes	
	AdHoc (Enter e-mail address from MFP.)	Yes	
File format	JPEG PDF (non-compression, G3 *, G4 *, JPEG) TIFF (non-compression, G3 *, G4 *, JPEG)	Yes	TIFF/PDF multiple page support *: B/W only

(3) Scanner settings

Key name	Classification	Display item	Remark
Color mode key	Color mode	*Color Gray B/W	The scan color is set. *Default is COLOR.
Format key	Format & compression type	TIFF TIFF G3 *PDF PDF G3 PDF G4 JPEG	The file format is specified. *Default is PDF.
	Multi file/ Single file	Single 1 page → 1 file *Multi all pages → 1 file Multi 2 pages → 1 file Multi 3 pages → 1 file Multi 4 pages → 1 file Multi 5 pages → 1 file Multi 6 pages → 1 file	Single : 1 page is made into 1 file. Multi : 2 or more pages are made into 1 file. *Default is "Multi all pages a 1 file."
Resolution key	Resolution	75dpi 100dpi *150dpi 200dpi 300dpi 400dpi 600dpi	The output resolution is set. *Default: 150dpi
Duplex key	Single document/ Duplex document	*1-SIDED 2-SIDED	Setting of single or duplex. Duplex setting is displayed only when the RSPF is installed. When "Duplex" is set, the document is scanned only from the RSPF. *Default is "Single."
	Vertical bind document (Vertical set) Horizontal bind document (Vertical set) Vertical bind document (Horizontal set) Horizontal bind document (Horizontal set)	Vertical bind document (Vertical set) Horizontal bind document (Vertical set) Vertical bind document (Horizontal set) Horizontal bind document (Horizontal set)	Selection of the following four (only when "Duplex document" is set.) • Vertical bind document (Vertical set) • Horizontal bind document (Vertical set) • Vertical bind document (Horizontal set) • Horizontal bind document (Horizontal set)
Document size key	Scan size	A3 / B4 / A4 / A4R / B5 / B5R / A5 / A5R 11 x 17 / 8½ x 14 / 8½ x 11 / 8½ x 11R / 5½ x 8½ / 5½ x 8½R	Setting of the scan size. The scan size is set with the document size detection, and can be manually changed. When the document size cannot be detected or when there is no size input, sending cannot be made. The display is made sequentially from the largest to the smallest, from the top to the bottom, each in the AB series and the inch series.

(3)-1. Color mode selection

When [Color Mode] key the machine is pressed, the following window is displayed.

(4) Send file (message and filename)

- Information contained in filename

Sender name : Use MFP product name.
Date & Time : Date and time at which file is sent
Session page counter : Image send counter
Unique identifier : Automatically created based on the information of the date and time and image send counter.

Example: AR-M350_20000620_155114_0057_06a3f3393948.pdf

- Mail subject

Can be freely set.

Default: Scanned image. device name: AR-XXX (MFP product name)

Example: Scanned image. device name: AR-XXX

- Mail message

The following messages are added to the image send mail.

Device name: Freely set
Model: MFP product name
Location: Freely set
File type: File type of send image
Resolution: Resolution of send image

Example;

Device name :AR-XXX

Model name :AR-XXX

Location :D2) Planning dept.

File type :PDF MMR (G4)

Resolution :200 dpi x 200 dpi

(5) Recipient registration

- The mail address registered for each destination can be selected from the mail address which is searched using LDAP.
- The information for each recipient includes the recipient name, IP address or mail address, scanning size, format type, and scan parameter.

(6) Scanning size

- The scanning size is the size of the document sensed or predetermined by the main unit(copier).
- If there is no information available about the document size from the main unit(copier), scanning is performed according to the scanning size predetermined in the destination registration section in advance. However, a detected or predetermined document size takes precedence over the information predetermined.

(7) Scanner limitations

- This unit should be connected to the USB port (USB-2) on the dual function board of the main unit(copier).

C. FUNCTIONS BY INTERFACE

When the network expansion kit is connected, the following functions are available by system interface.

System I/F (main unit)	AR-NB3 I/F	Function				
		SPLC	GDI	PCL5e/6	PS (*1)	Net Scan
USB2.0	RJ45 (LAN)	No	No	Yes	Yes	Yes
USB1.1	→	Yes	No	No	No	No
IEEE1284	→	Yes	No	No	No	No
USB2.0	→	No	No	Yes	Yes	No
USB1.1	RJ45 (LAN)	Yes	No	No	No	No
IEEE1284	→	Yes	No	No	No	No
USB1.1	RJ45 (LAN)	No	No	Yes (*2)	Yes (*2)	No
IEEE1284	→	No	Yes	No	No	No

(*1): PS requires soft keys of the AR-PK1.

(*2): Some functions are not available.

D. NETWORK SETUP

Network setups should be performed by the system administrator. Use a setup tool such as TCP/IP, Netware, Ether Talk or Web interface.

E. SOFTWARE SETUP

The network expansion kit can be installed by setting up NIC, installing a printer driver with the total installer, and installing Sharpdesk.

(1) Installing driver

The network expansion kit printer is connected only through the network. The port setup required for installing a printer driver is the network only. The following items should be set up.

- TCP/IP peer-to-peer port

- 1) Search for the network expansion kit on the network and select the network expansion kit you want or enter the IP address of the applicable network expansion kit to create a TCP/IP port.
- 2) Install the driver to the created port.

- Windows printer shared port

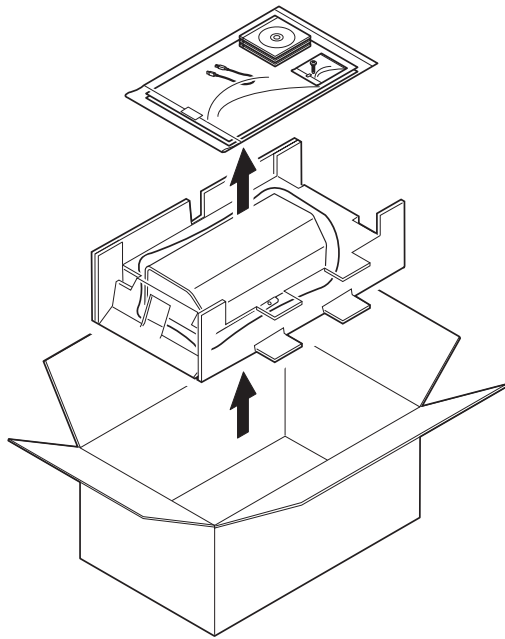
When the setup of the above client PC is completed and the printer is set to "Windows shared printer," other client PCs can select this printer shared port and then proceed to installation of the driver.

F. HARDWARE SETUP

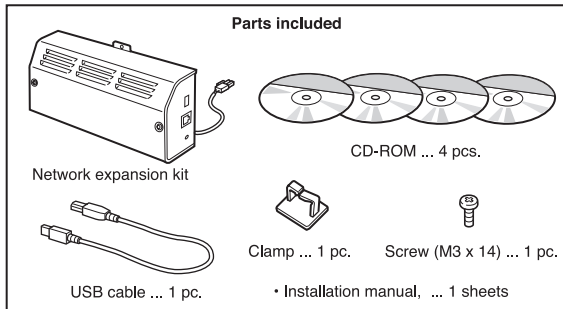
- 1) Requirements for connecting network expansion kit
 - Dual function board mounted model is recommended
 - Dual function board is surely required for network scanning
- 2) Connection to the main unit(copier)
 - When Dual function board is used, connects with USB2.0 port of a main unit(copier).
- 3) Power supply
Supplied by the main unit

[3] UNPACKING AND INSTALLATION

1. UNPACKING



2. PACKAGED GOODS

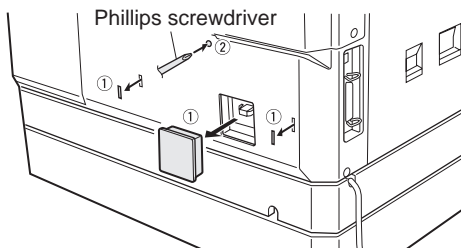


3. INSTALLATION PROCEDURE

Turn off the main switch of the main unit and remove the power plug of the main unit from the outlet.

1. Cut out the cut-out portions from the rear cabinet.

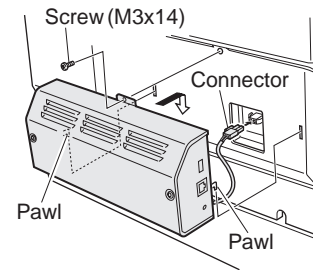
- 1) Cut out three cut-out portions from the rear cabinet using a cutter or the like.
- 2) Use a Phillips screwdriver or the like to open a hole.



2. Attach the network expansion kit.

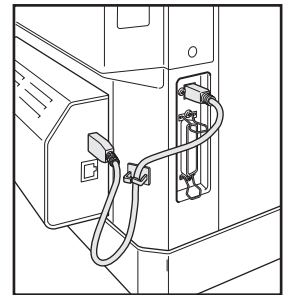
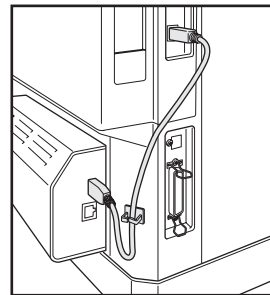
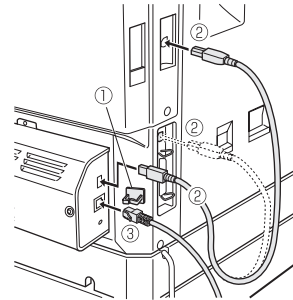
Connect the connector of the network expansion kit to the connector of the main unit and put excessive harness into the cut-out portion in the main unit.

Engage the two pawls on the rear of the network expansion kit with the cut-out portions of the main unit and network expansion kit using the supplied screw (3 x 14).



3. Connect the USB cable and the network cable.

- 1) Attach the supplied cable clamp to the position shown in the illustration.
- 2) Connect the USB cable to the network expansion kit and the main unit. At this time, reduce slack of the cable with the cable clamp as shown in the illustration.
- 3) Connect the network cable.






Insert the power plug of the copier to the outlet, turn the main switch of the copier to the "ON" position, and perform network setting and installation of the software.

[4] SETUP IN A WINDOWS ENVIRONMENT

1. SETTING THE IP ADDRESS OF THE MACHINE

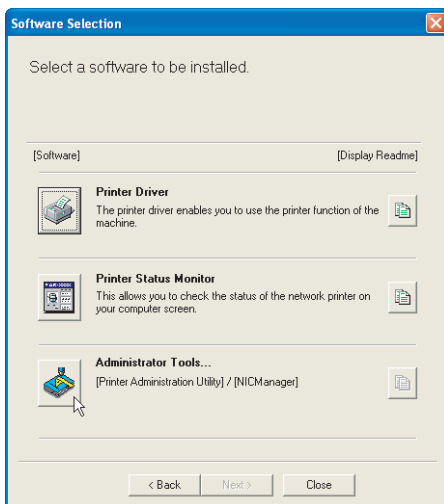
Before installing the printer driver, be sure to set the IP address of the machine. Consult your network administrator for the correct IP address, subnet mask, and default gateway to be entered. If a DHCP server will automatically assign an IP address to the machine, the following procedure is not necessary. (To check the IP address assigned to the machine by DHCP, see "2. CHECKING THE IP ADDRESS" .)

Note: If the machine is used in a DHCP environment, the machine's IP address may change automatically. If this happens, printing will no longer be possible. In this event, use a WINS server or do not use the machine in a DHCP environment.

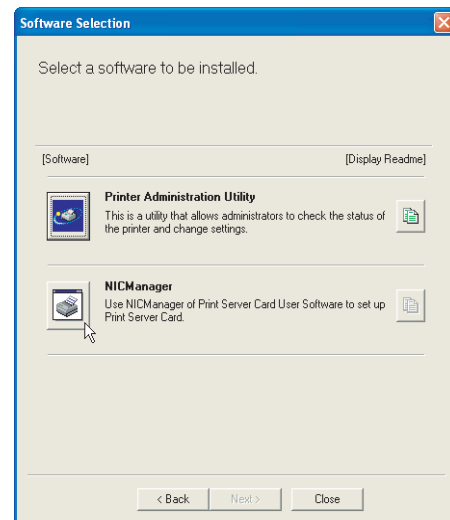
- 1) Make sure that the LAN cable is connected to the machine and then turn on the machine.
- 2) Insert the network expansion kit AR-NB3 "Software" CD-ROM into your computer's CD-ROM drive.
- 3) Click the "start" button, click "My Computer" (), and then double-click the CD-ROM icon ().
In Windows 95/98/Me/NT 4.0/2000, double-click "My Computer" and then double-click the CD-ROM icon.
- 4) Double-click the "setup" icon ().

Note: If the language selection screen appears after you double click the "setup" icon, select the language that you wish to use and click the "Next" button. (Normally the correct language is selected automatically.)

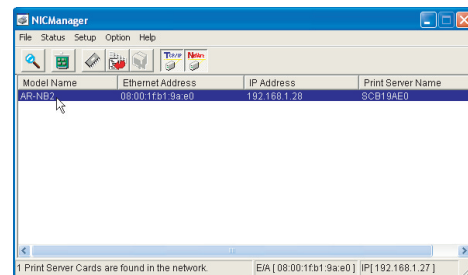
- 5) The "SOFTWARE LICENSE" window will appear. Make sure that you understand the contents of the license agreement, and then click the "Yes" button.
- 6) Read the message in the "Welcome" window and then click the "Next" button.
- 7) Click the "Administrator Tools" button.



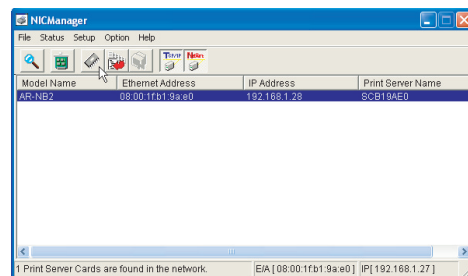
- 8) Click the "NICManager" button.



- 9) The printer or printers connected to the network will be detected. Click the printer to be configured (the machine).
Select the "AR-NB3".



- 10) Click the "Print Server Card Setup" button.



Enter your password in the password entry screen and click "OK".

The Print Server Card Setup window will appear.

The password for this product has been initially set to "Sharp".

If the "Guest user" checkbox is selected, the settings can be viewed but not configured.

- 11) Click the "TCP/IP" tab.
- 12) Configure the settings and then click the "Update" button.

Be sure to ask your network administrator for the correct IP address, subnet mask, and default gateway to be entered.

- 13) Your changes to the settings appear.

Make sure that the changes are correct and then click the "OK" button.

14) Restart the machine.

Power off the machine and then power it back on.

15) Select "Search" from the "File" menu.

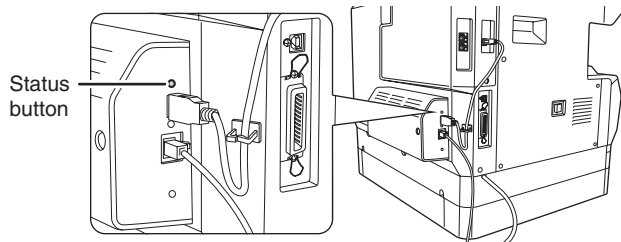
The IP address that you entered will appear. Make sure that it is correct.

The completes the IP address settings.

2. CHECKING THE IP ADDRESS

There are several settings where the IP address must be entered or checked.

To check the IP address of the machine, hold down the status button on the network expansion kit at least 2 seconds to print out a Printer Setting List.



Caution: **How to reset the network expansion kit**

To reset the network expansion kit, power on the machine while holding down the status button on the network expansion kit.

Network scanner destination information and scanning settings will remain after the network expansion kit is reset, however, the network settings and network printer settings will revert to the factory default settings.

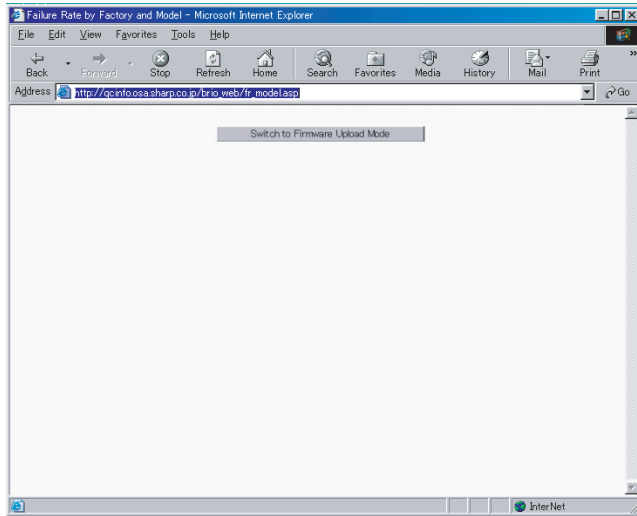
[5] Updating Network Box Firmware

Update the Network Box firmware in the following procedure using a Web browser.

1. Display the web page for updating Network Box firmware

Start the browser on your PC and specify the following URL. A web page, as shown in Fig. 1, appears on screen.

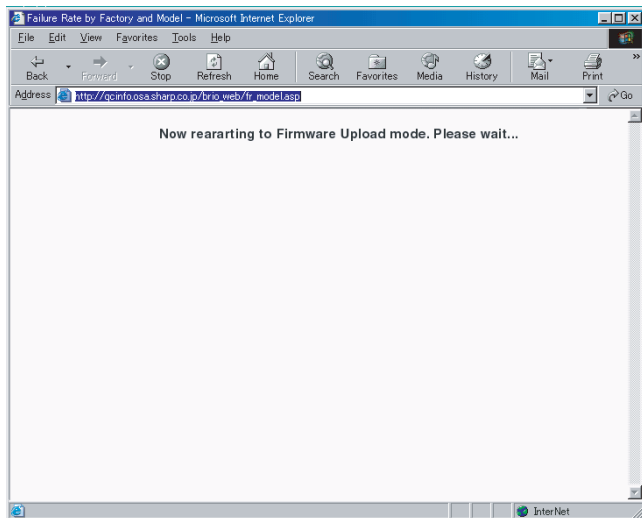
http://<IP Address of Network Box>/firmware_upload.html



[Fig.1: Web page for updating Network Box firmware]

2. Switch to firmware upload mode

Click the button on the screen, the message shown in Fig.2 appears.

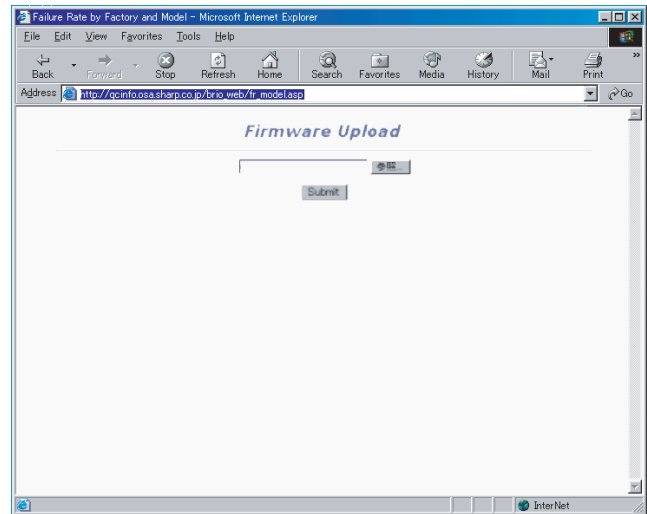


[Fig.2: Switch to firmware upload mode]

The page changes to the Network Box firmware upload mode.

The browser is automatically reloaded and then the screen looks like this.

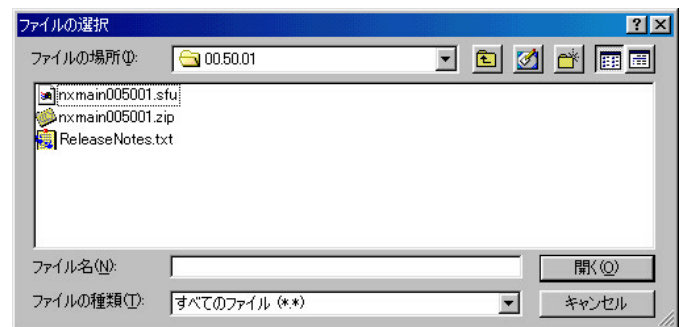
*When the screen shown in fig.3 is not displayed, refresh a browser manually.



[Fig. 3: Upload mode]

3. Specifying the file

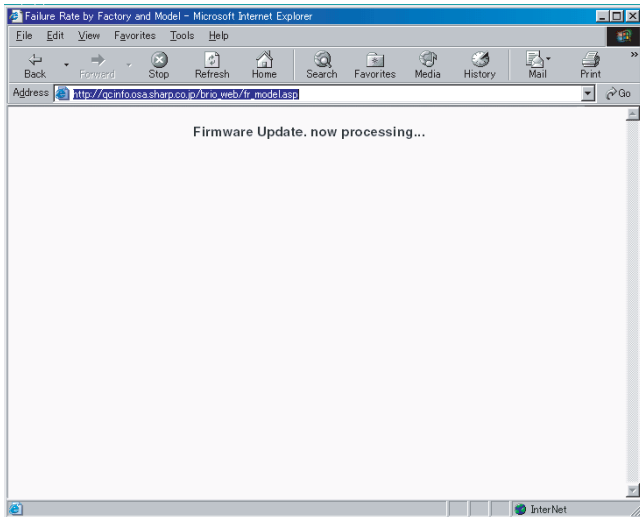
Click the Reference button. Selects the firmware of the Network Box version you want to update, from the file selection menu indicated in Fig.4.



[Fig. 4: Specifying the file]

4. Updating the firmware

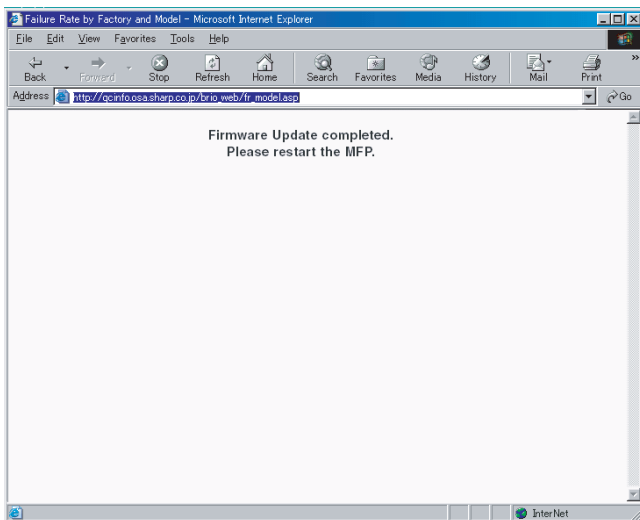
After you select the file, click the Submit button. The firmware is transmitted to Network Box, and it is updated. The message indicated in Fig.5 blinks repeatedly until the updating process is completed. Do not turn off the power supply.



[Fig.5: Updating in progress]

5. Restarting your PC

When updating is completed, the message shown in Fig.6 appears on screen. Turn off the power and then turn it on again to restart Network Box.



[Fig.6: Updating completed]

Note: If you want to set the IP address of the Network Box at first, use the NIC Manager. Select and set your model name and an appropriate Ethernet address from the list.

Both the Boot and Main files can be updated in the same procedure as mentioned above. However, when you want to update both at the same time, you need to update them separately by repeating the same procedure twice.

Caution: If a DHCP is used, the browser may not be able to reload automatically in some cases when transferring to the upload mode because different IP addresses are read. Therefore, we recommend that you use a fixed IP address when updating firmware.

If the upload mode is operating with different IP addresses, check the IP address obtained by the Ethernet address of Network Box from the DHCP server and display the updating mode URL again using the browser.

When a proxy server is used, the screen may not be updated by reloading. In that case, you need to update manually.

[6] TROUBLE CODE

1. TROUBLE CODE (CE CODE)

If a transmission error occurs when you send a scanned image, a message informing you of the error and an error code will appear in the display on the machine.

Error Code	Solution
CE-00 CE-01	Turn off the power and then turn it back on. Consult with your network administrator to make sure that no problems exist on the network or in the server. If the error is not cleared after turning the power off and on, turn off the power and contact your dealer.
CE-02 CE-04	The scanned image was not sent because a connection to the server could not be established. Make sure that the SMTP server settings or Scan to FTP destination settings in the Web page are correct. The procedure for configuring the SMTP server is explained in "VARIOUS SERVER SETTINGS", and the procedure for editing Scan to FTP destination information is explained in "Editing and deleting programmed transmission destinations". For information on the settings to be entered, see Help in the Web page.
CE-03	The scanned image was not sent because the server was busy or there was too much traffic on line. Wait briefly and then try again.
CE-05	The scanned image was not sent because the directory of the destination FTP server was not correct. Make sure that the correct FTP server information is configured in the Web page.
CE-09	The size of the scanned image file exceeds the limit set in "Maximum Size of E-mail attachments" in the Web page. Reduce the number of original pages scanned into the file, or change the limit set in "Maximum Size of E-mail attachments".
CE-11	The memory became full during scanning. Scan less pages, lower the resolution, or change the color mode so that the file size is smaller, and try scanning again.
CE-12	The maximum number of destinations of a global address search has been exceeded. Increase the number of search characters to narrow the range of the global address search.

2. KEY OPERATOR PROGRAMS

The key operator programs allow the administrator of the machine (key operator) to enable and disable functions so to suit the needs of the workplace. This chapter explains the key operator programs for the network scanner functions.

Note: For the initial key operator code set at the factory, see "PROGRAMMING THE KEY OPERATOR CODE" in the "Key operator's guide".

2-1. KEY OPERATOR PROGRAM LIST

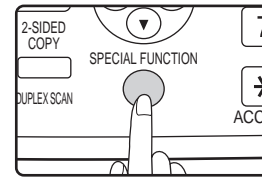
The key operator programs for the network and printer functions are shown in the following table.

Factory default settings are indicated in bold.

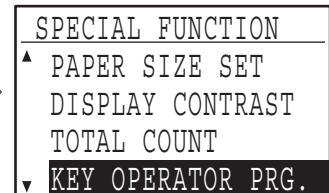
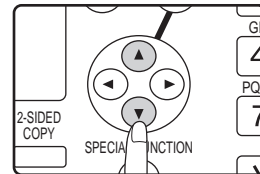
Mode	Program	Settings	Explanation
SCANNER	DISABLE USB SCAN	YES, NO	Select whether or not scanning from a computer and scanning from the machine are disabled when a USB connection is used. When "YES" is selected, USB scanning is disabled.
	INITIAL COND.	COLOR MODE	This is used to change the default settings for the color mode, format, and resolution.
		FORMAT	
		RESOLUTION	

2-2. USING THE KEY OPERATOR PROGRAMS

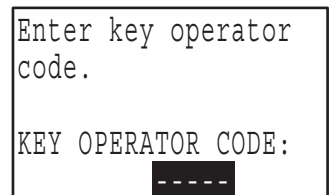
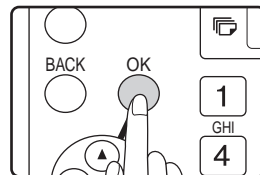
- Press the [SPECIAL FUNCTION] key.
The special function screen will appear.



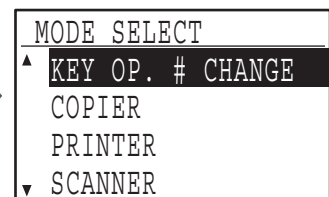
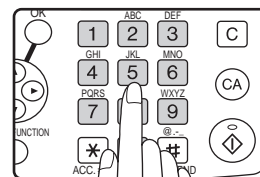
- Select "KEY OPERATOR PRG." with the [▲] or [▼] key.



- Press the [OK] key.
The key operator code entry screen appears.

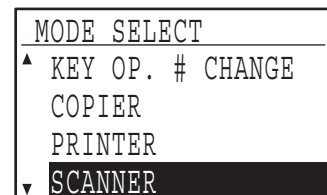
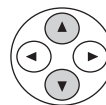


- Enter the key operator code with the numeric keys.

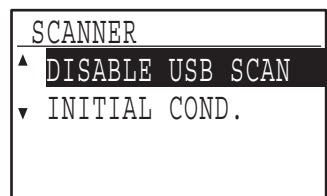


- "*" will appear for each digit will enter.
- The mode selection screen will appear.

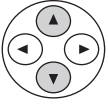
- Select the desired mode with the [▲] or [▼] key.



- Press the [OK] key.
The settings of the selected mode will appear.
Example: The screen when "SCANNER" is selected.



7. Select the desired program with the [▲] or [▼] key.



- If a checkbox appears to the left of the program name, the program is enabled by pressing the [OK] key to make a checkmark appear. The program is disabled by pressing the [OK] key once again to clear the checkmark. After making the selection, go to step 9.
 - If a checkbox does not appear by a program, press the [OK] key to display the settings screen for the program.
8. Press the [OK] key and follow the instructions in the program screen.



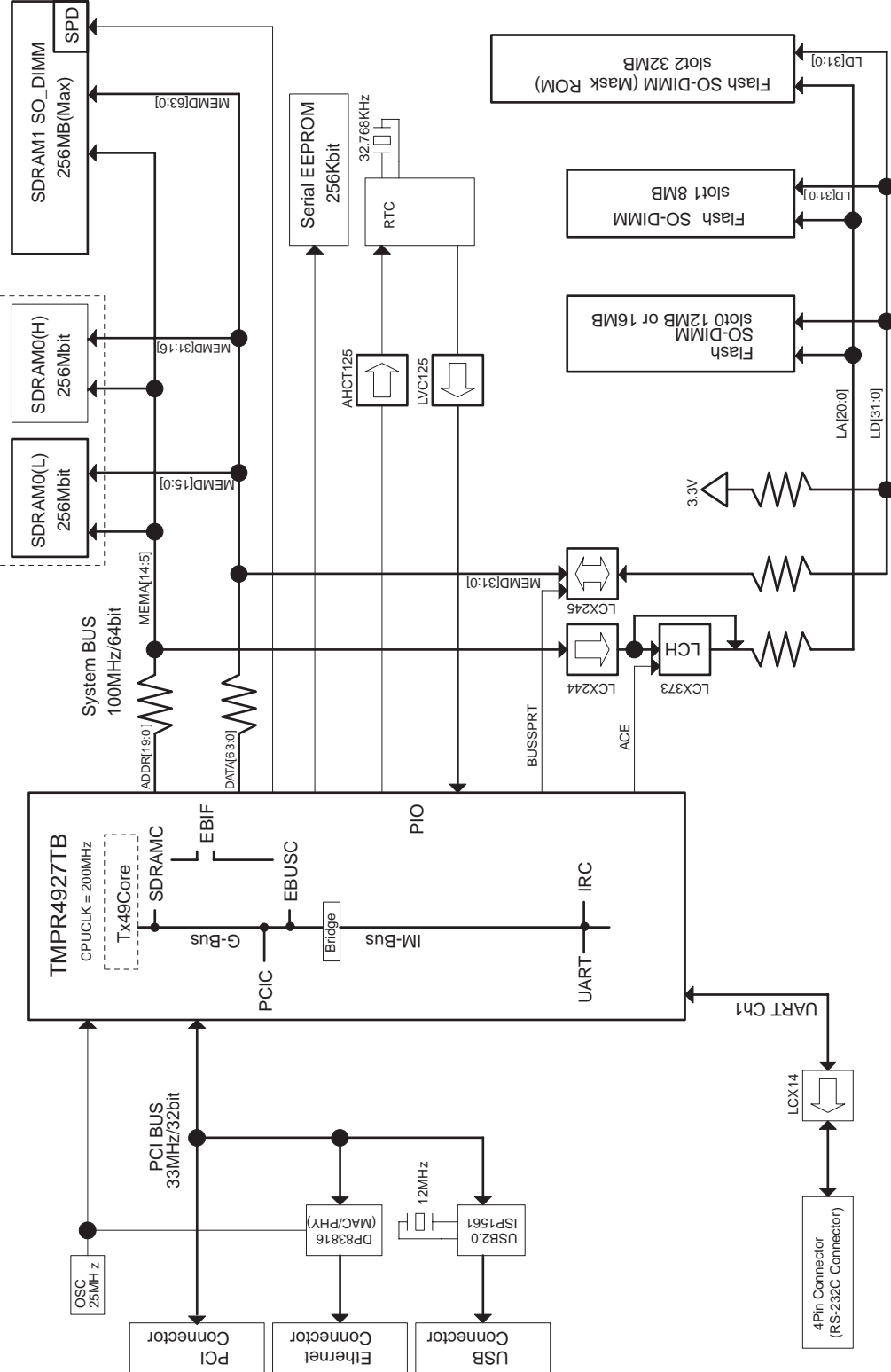
9. To use another program for the same mode, select the desired program with the [▲] or [▼] key.
- To use a program for a different mode, press the [BACK] key and select the desired mode. Press the [CA] key to exit the key operator programs.

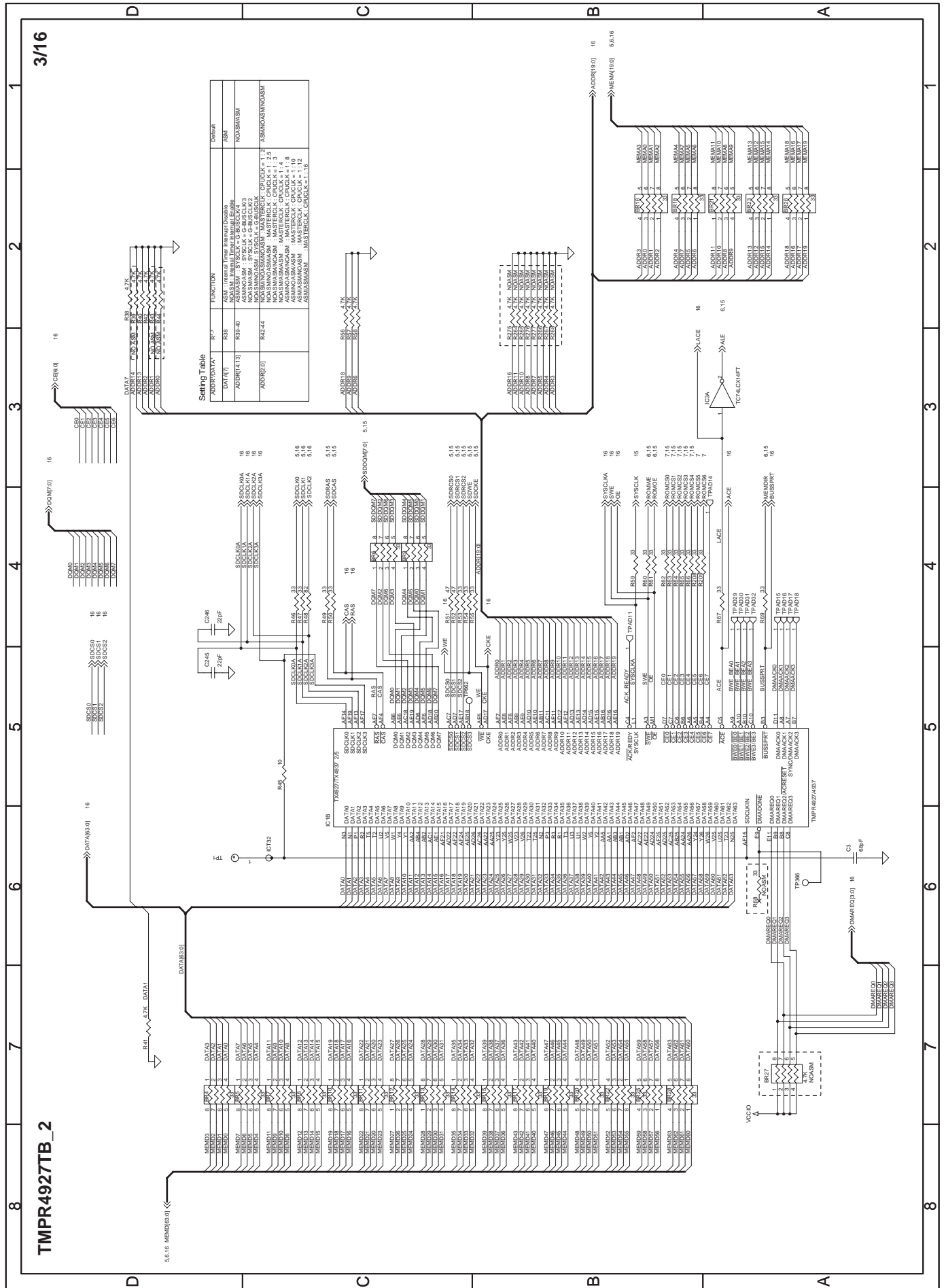
[7] CIRCUIT DIAGRAM

BLOCK DIAGRAM

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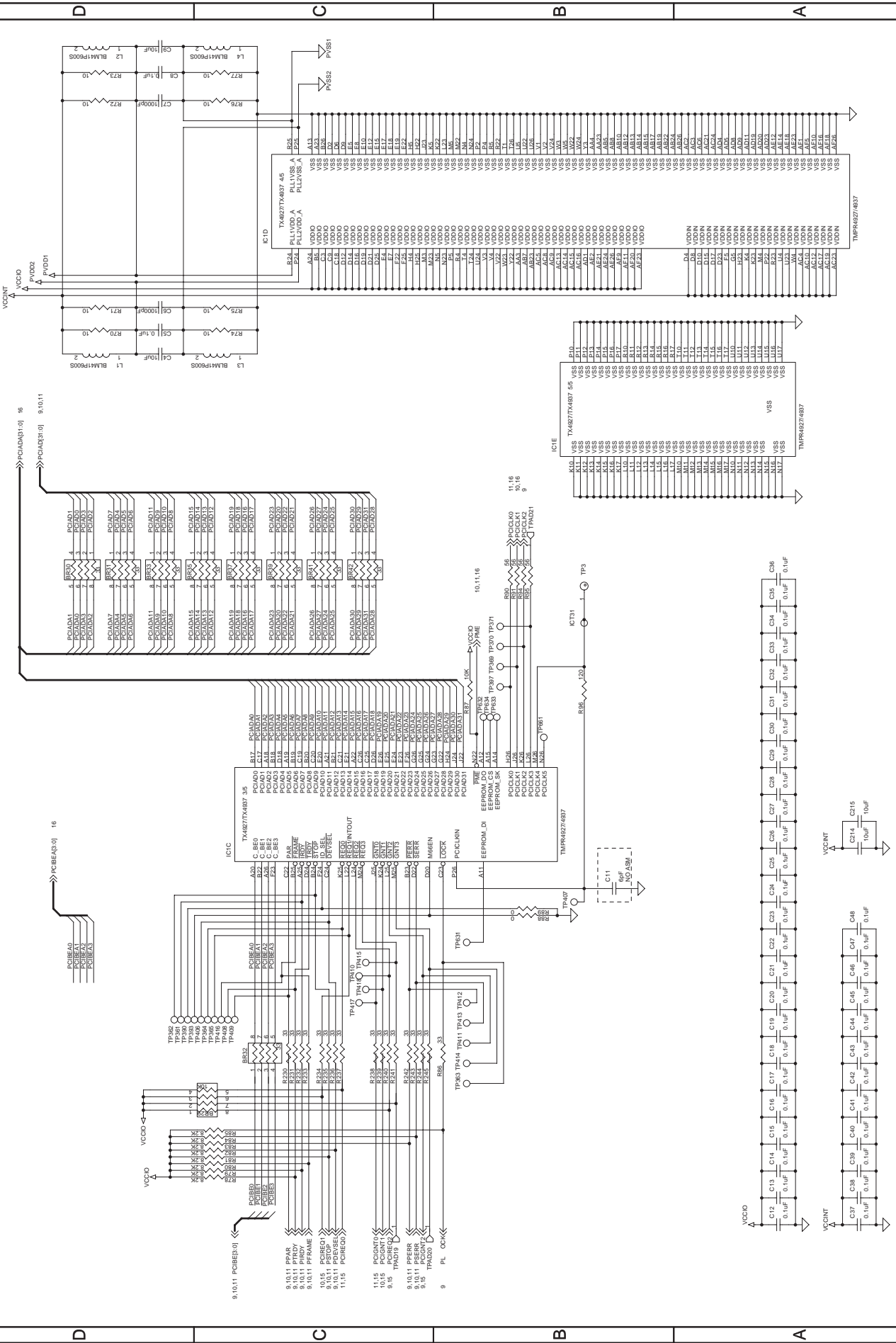
< NW-Boxa6 Block Diagram >

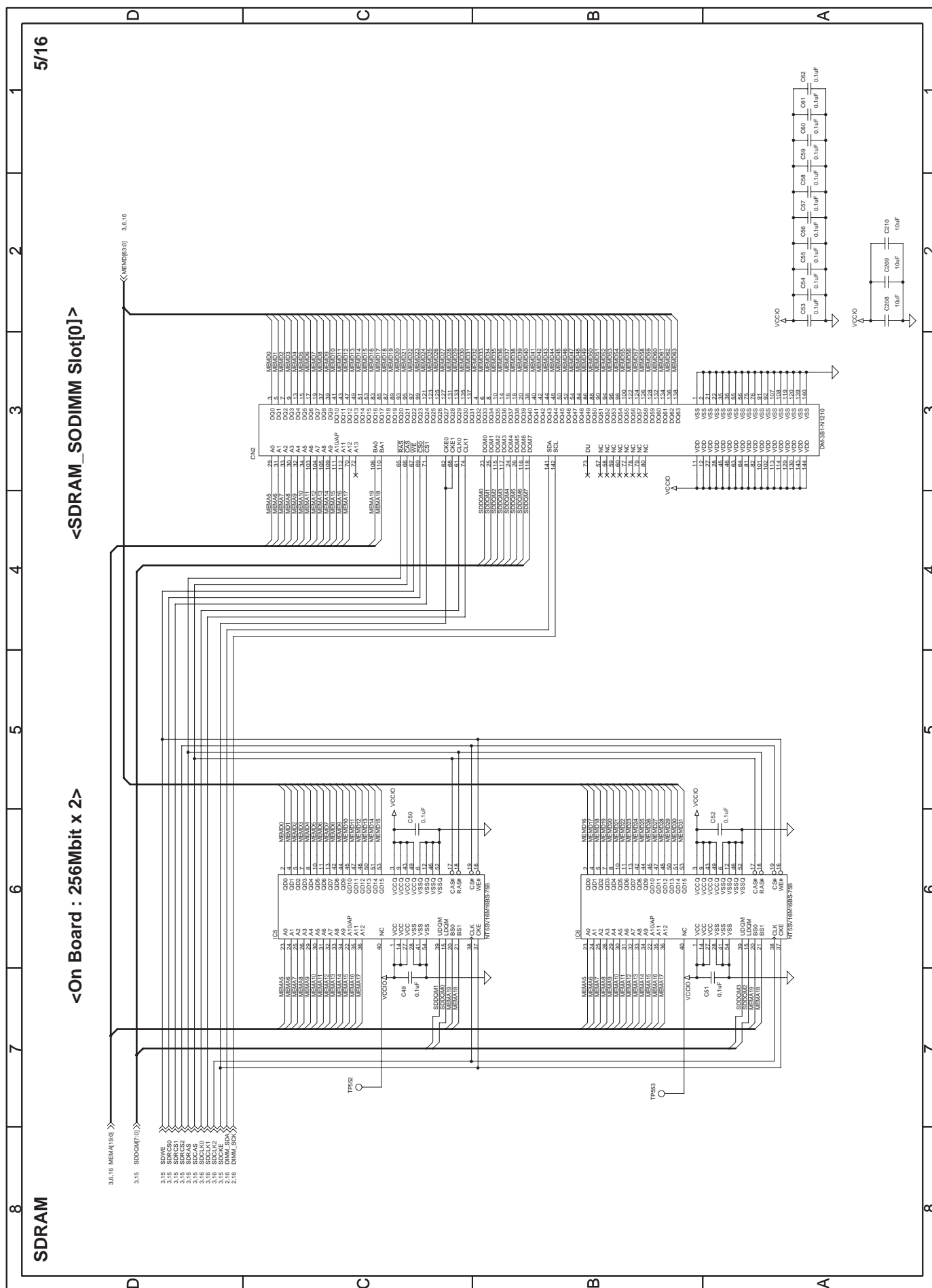




TMPR4927TB_3

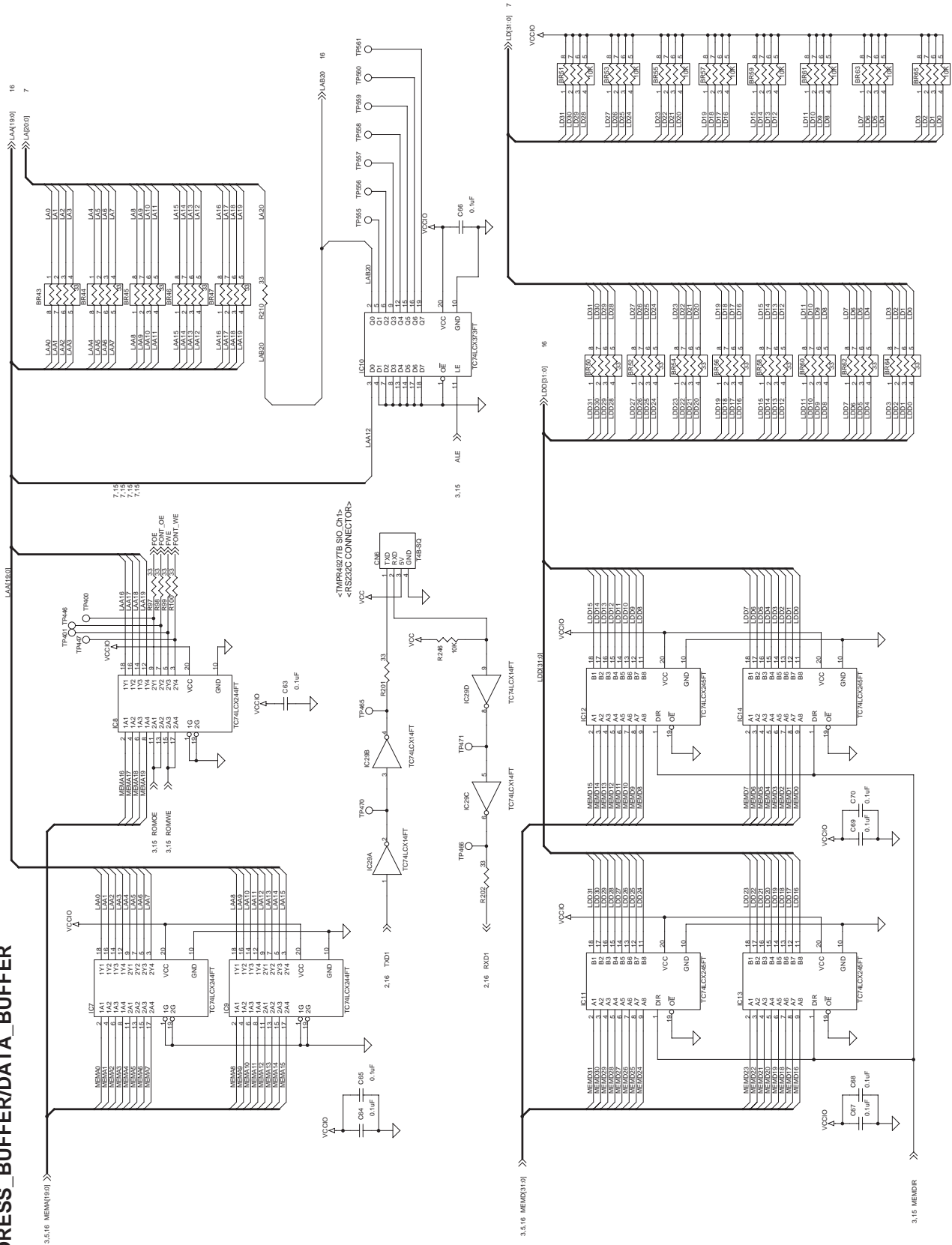
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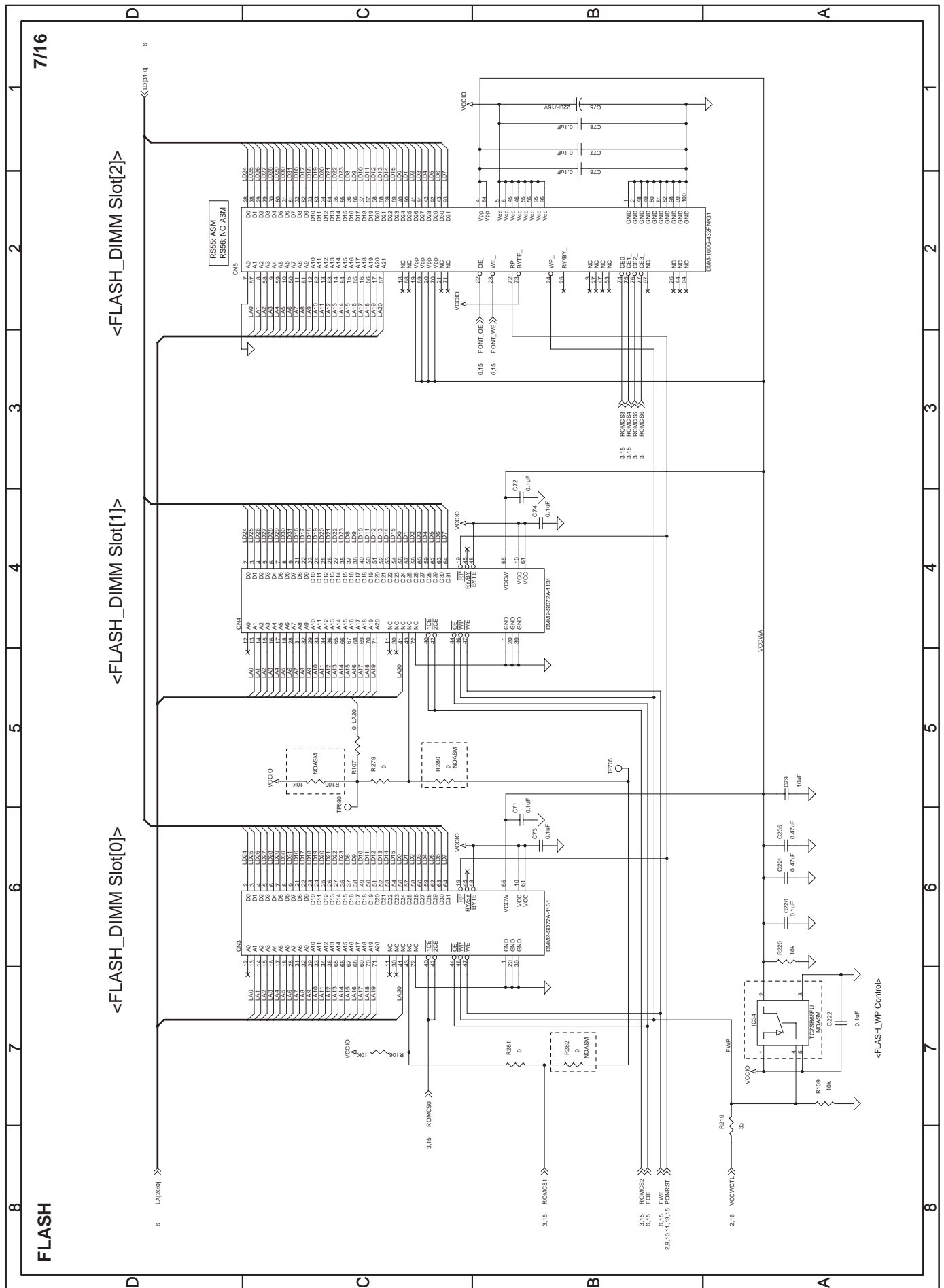




ADDRESS_BUFFER/DATA_BUFFER

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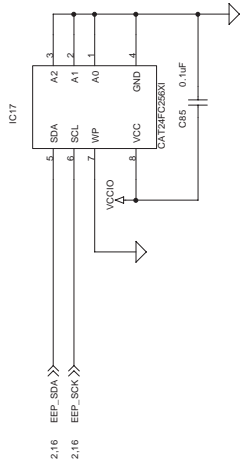




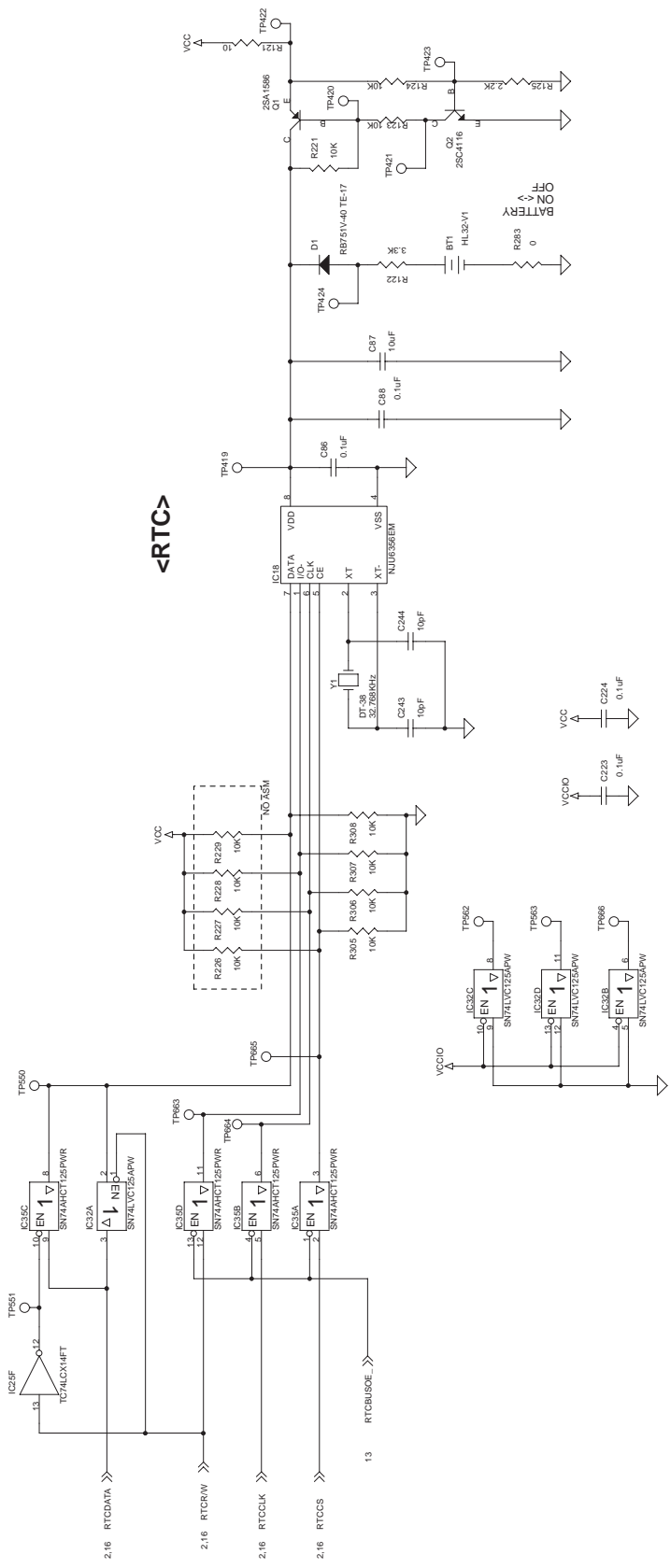
Serial_EEPROM/RTC

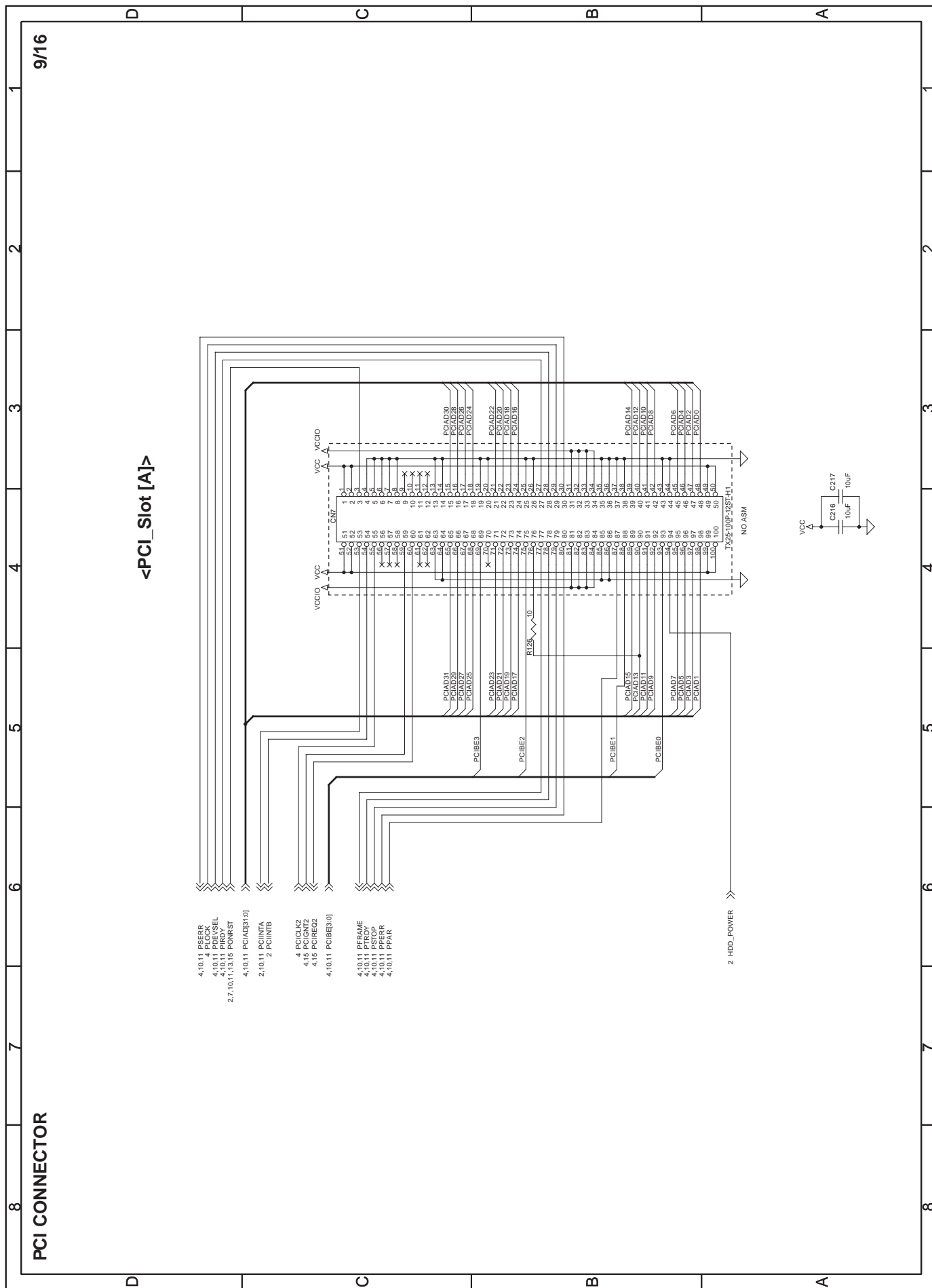
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<Serial EEPROM>



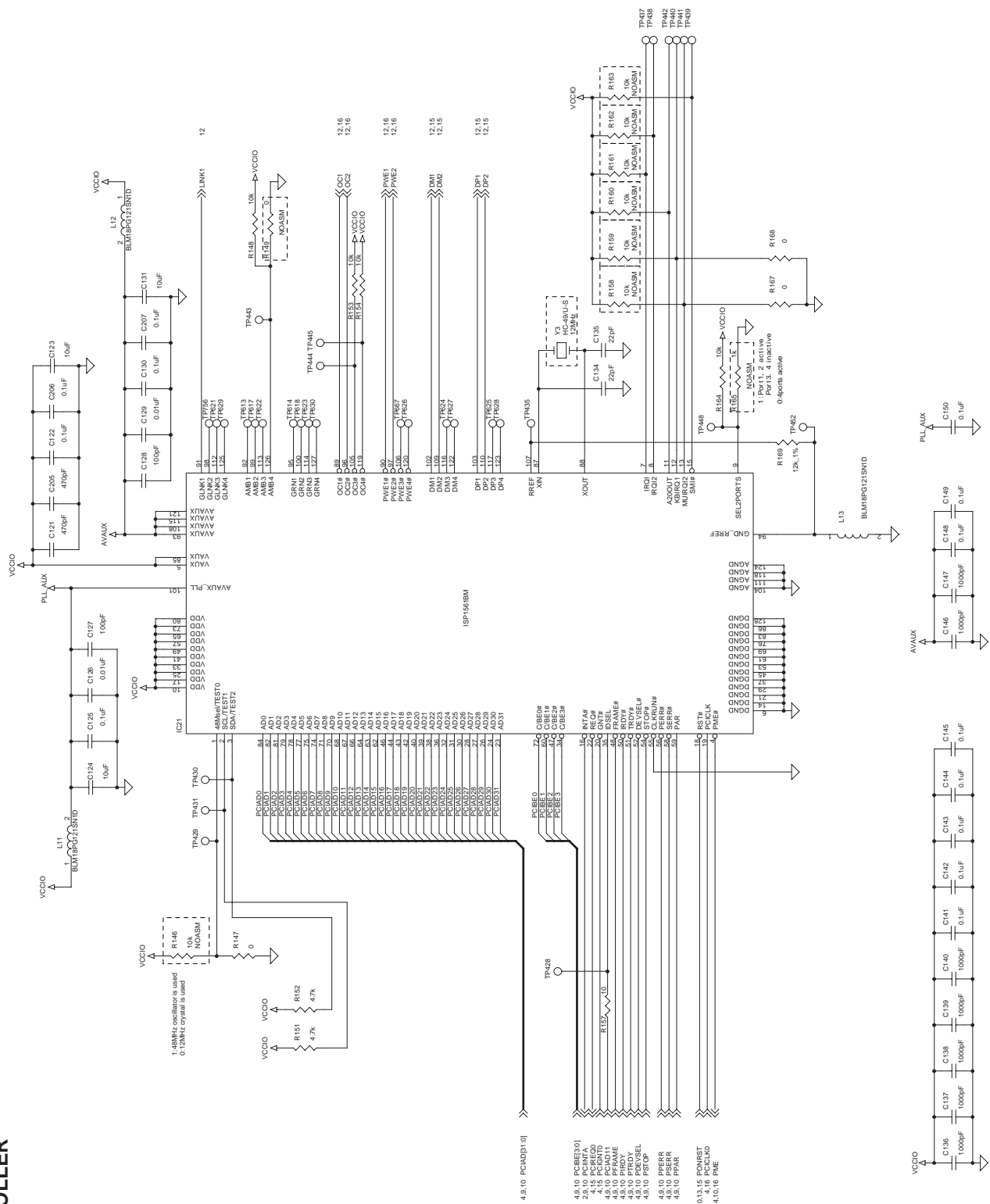
<RTC>



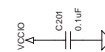


USB CONTROLLER

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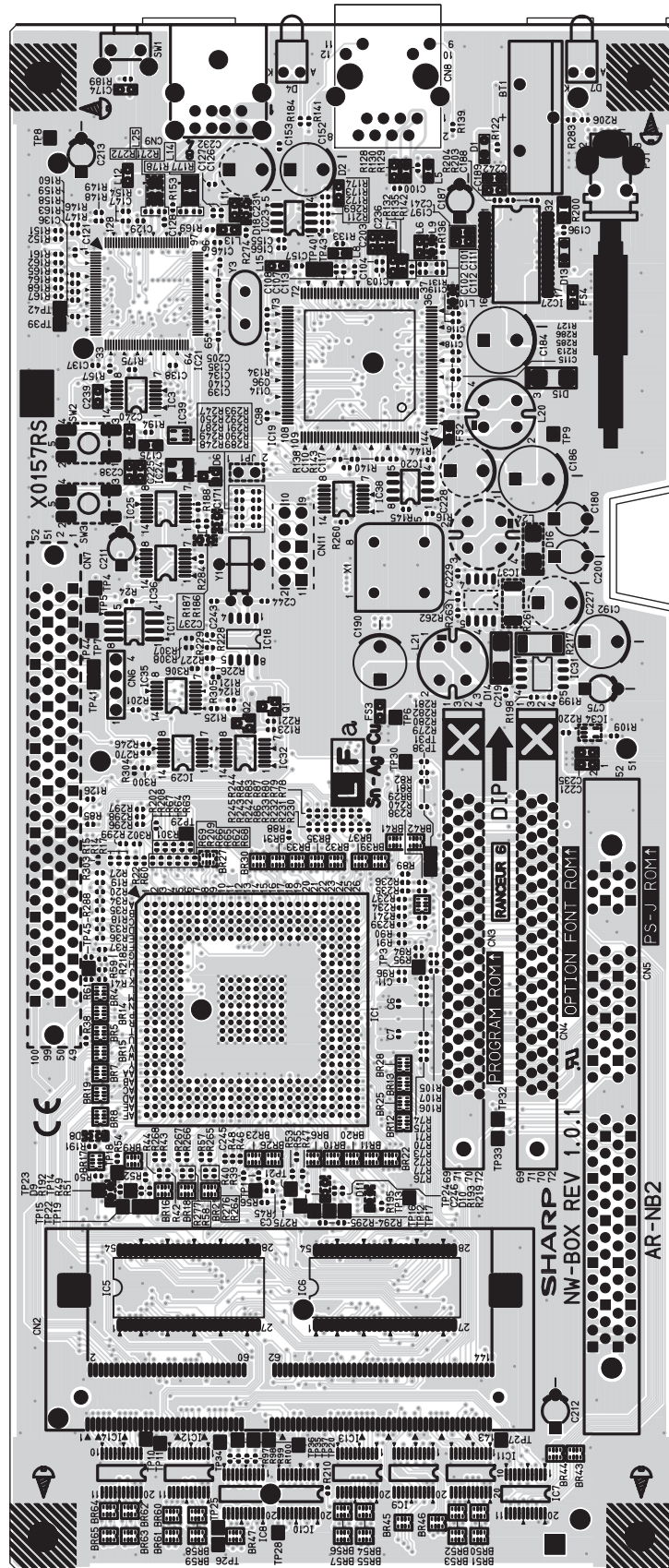
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[8] PARTS LAYOUT

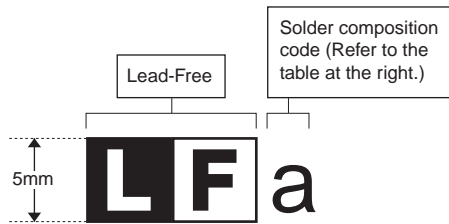
1. PARTS SIDE



LEAD-FREE SOLDER

The PWB's of this model employs lead-free solder. The "LF" marks indicated on the PWB's and the Service Manual mean "Lead-Free" solder. The alphabet following the LF mark shows the kind of lead-free solder.

Example:



<Solder composition code of lead-free solder>

Solder composition	Solder composition code
Sn-Ag-Cu	a
Sn-Ag-Bi	b
Sn-Ag-Bi-Cu	
Sn-Zn-Bi	z
Sn-In-Ag-Bi	i
Sn-Cu-Ni	n
Sn-Ag-Sb	s
Bi-Sn-Ag-P	p
Bi-Sn-Ag	

(1) NOTE FOR THE USE OF LEAD-FREE SOLDER THREAD

When repairing a lead-free solder PWB, use lead-free solder thread. Never use conventional lead solder thread, which may cause a breakdown or an accident.

Since the melting point of lead-free solder thread is about 40°C higher than that of conventional lead solder thread, the use of the exclusive-use soldering iron is recommendable.

(2) NOTE FOR SOLDERING WORK

Since the melting point of lead-free solder is about 220°C, which is about 40°C higher than that of conventional lead solder, and its soldering capacity is inferior to conventional one, it is apt to keep the soldering iron in contact with the PWB for longer time. This may cause land separation or may exceed the heat-resistive temperature of components. Use enough care to separate the soldering iron from the PWB when completion of soldering is confirmed.

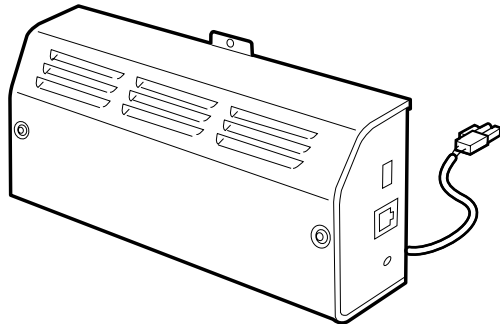
Since lead-free solder includes a greater quantity of tin, the iron tip may corrode easily. Turn ON/OFF the soldering iron power frequently.

If different-kind solder remains on the soldering iron tip, it is melted together with lead-free solder. To avoid this, clean the soldering iron tip after completion of soldering work.

If the soldering iron tip is discolored black during soldering work, clean and file the tip with steel wool or a fine filer.

SHARP PARTS GUIDE

CODE:00ZARNB3//P1/



デジタル複合機
プリンタ/マルチファンクション システム オプション
**DIGITAL COPIER / PRINTER /
MULTIFUNCTIONAL SYSTEM
OPTION**

MODEL **AR-NB3**

このパーツガイドに掲載されている表示価格ランクは消費税抜きです。

CONTENTS

- ① ネットワーク BOX ユニット (Network BOX unit)
- ② 梱包 & 付属品 (Packing material & Accessories)
- ③ ネットワーク基板 (Network PWB unit)
- 索引 (Index)

補修部品のランク付

市場における補修部品の在庫管理が、適正に運営出来る手助けとなることを、目的とします。

- Aランク：メンテナンスパーツ、メンテナンスパーツには入っていないがメンテナンスパーツに近い消耗パーツ。
- Bランク：性能・機能パーツ（センサー、クラッチ等の電気パーツ）、消耗パーツ。
- Eランク：基板含むユニットパーツ。
- Dランク：整備パーツ（外装、パッキング、同梱パーツ）。
- Cランク：上記ランク以外のパーツ（基板の子部品を除いたもの）。

DEFINITION

- Rank A：Maintenance parts, and consumable parts which are not included in but closely related to maintenance parts
- Rank B：Performance/function parts (sensors, clutches, and other electrical parts), consumable parts
- Rank E：Unit parts including PWB
- Rank D：Preparation parts (External fitting, packing, parts packed together)
- Rank C：Parts other than the above (excluding sub components of PWB)

安全性・信頼性確保のため部品は、必ず正規のものをご使用下さい。

△印の商品は、安全上重要な部品です。交換をする時は、安全及び性能維持のため必ず指定の部品をご使用下さい。

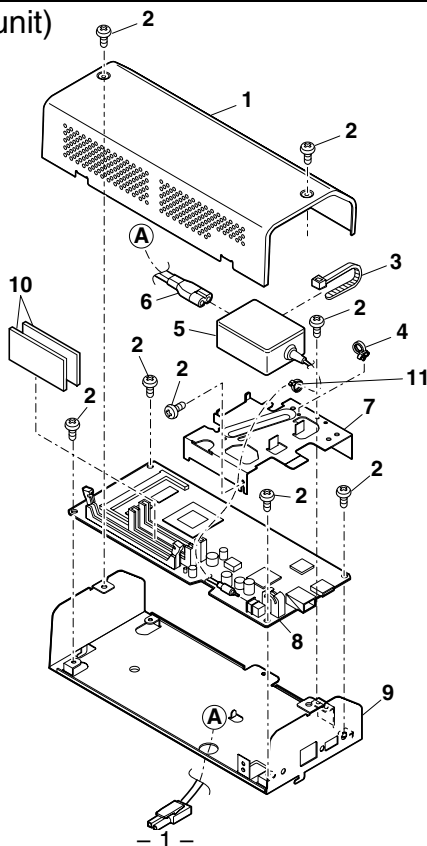
Because parts marked with "△" is indispensable for the machine safety maintenance and operation, it must be replaced with the parts specific to the product specification.

- 当モデルのサービス資料には、この資料以外にサービスマニュアル（回路図含む）があります。合わせてご利用下さい。
- Other than this Parts Guide, please refer to documents Service Manual (including Circuit Diagram) of this model.
- Please use the 13 digit code described in the right hand corner of front cover of the document, when you place an order.
- For U.S. only-Use order codes provided in advertising literature. Do not order from parts department.

1 ネットワーク BOX ユニット (Network BOX unit)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION
		Ex.	Ja.			
1	PC0VP0099QSZ3	AT	EZ	N	C	Network B Cover ネットワーク B カバー
2	XHBSE30P06000	AA	DD		C	Screw(3x6) ビス
3	LBNDJ0003QSZZ	AD	DJ		C	Wire band 結束バンド 250
4	LBNDJ0043FCZ1	AA	DJ		C	Wire band バンド
△ 5	RADPA0008QSZZ	BD	GN		B	AC Adapter AC アダプター
6	DHAi-0450QSZZ	AK	DX		C	AC harness [U.S.A,Canada] AC ハarness
	DHAi-0433QSZZ	AW	FG		C	PS harness [Other countries] 電源ハarness
7	LPLTM0358QSZZ	AK	DX		C	AC Adapter fixing plate AC アダプター取付け板
8	CPWBX0157RS55	CD	UD	N	E	Network PWB [Japan] ネットワーク基板
	CPWBX0157RS56	CC	TZ	N	E	Network PWB [Except Japan] ネットワーク基板
9	LFRM-0073QSZ1	AQ	EQ	N	C	Network B Frame ネットワーク B フレーム
10	VHi29L12815QS	BN	LE	N	B	PRGDIMM NB2EJ(29L12815QS) [Japan] PRGDIMM NB2EJ
	VHi29L96044QS	BL	HL	N	B	PRGDIMM NB2EL(29L96044QS) [U.S.A,Canada] PRGDIMM NB2EL
11	LBNDJ0013FCZ1	AE	DJ		C	Wire band バンド

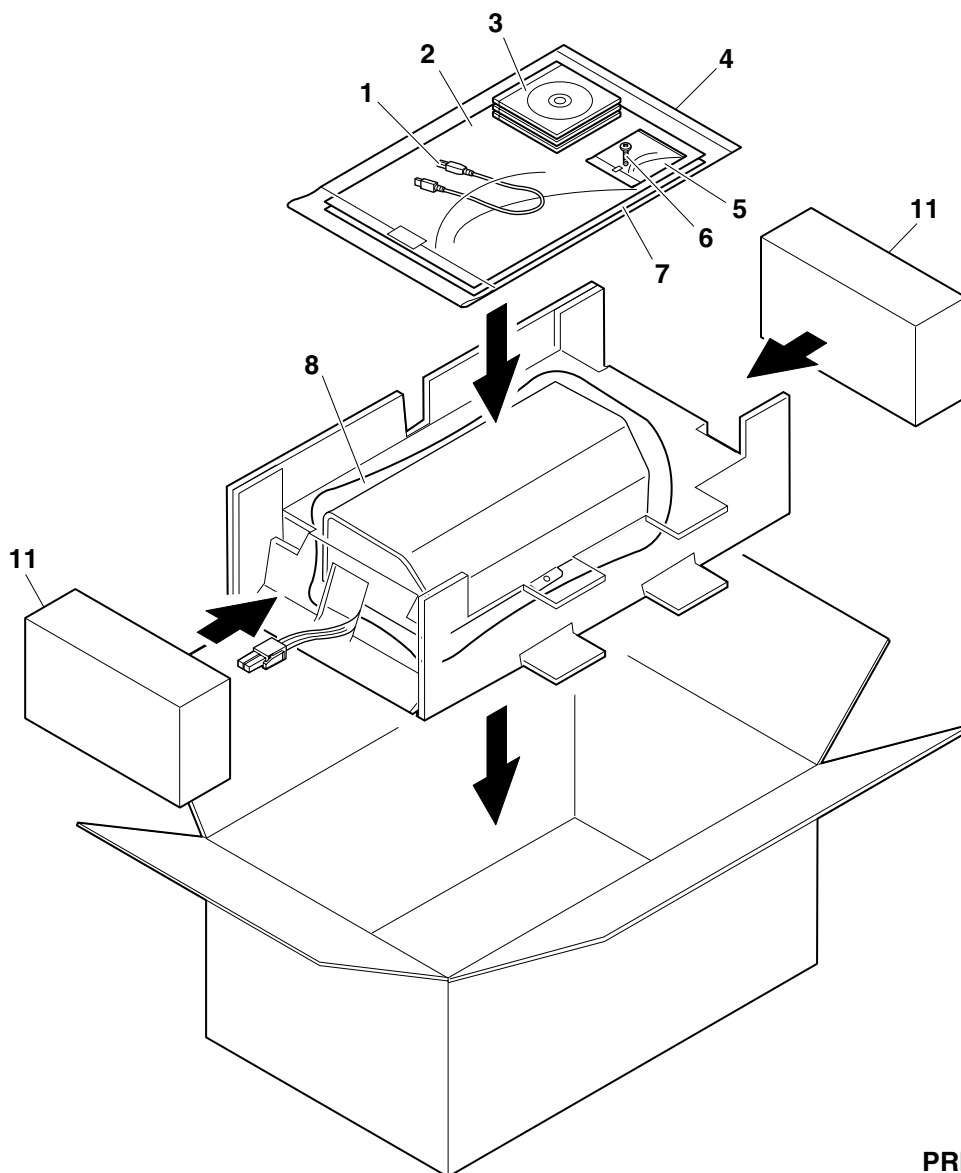
1 ネットワーク BOX ユニット (Network BOX unit)



2 梱包 & 付属品 (Packing material & Accessories)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION
		Ex.	Ja.			
1	QCNWG0012QSZZ	AP	EQ	N	C	Connector(USB2.0-0.4M) コネクタ
2	TCADZ0367QSZZ	AE	DJ	N	D	Inst.manual 設置手順書
3	CDSKA0073QS31	BH	GX	N	D	CD-ROM(P-E P) [Japan] CD-ROM
	CDSKA0074QS31	BB	GD	N	D	CD-ROM(P-E P) [Except Japan] CD-ROM
	CDSKA0075QS31	BH	GX	N	D	CD-ROM(P-E NIC) CD-ROM
	CDSKA0076QS31	BH	GX	N	D	CD-ROM(P-E S) [Japan] CD-ROM
	CDSKA0077QS31	BB	GD	N	D	CD-ROM(P-E S) [Except Japan] CD-ROM
	CDSKA0079QS31	BB	GD	N	D	CD-ROM(NB3 IE) [Except Japan] CD-ROM
4	SSAKA0005WCZZ	AA	DD		D	Vinyl bag(160×260mm) ホリ袋
5	SSAKA0006UCZZ	AA	DD		D	Vinyl bag(50×60mm) ホリ袋
6	XHBSE30P14000	AA	DD		C	Screw(3×14) ビス
7	TCADZ0368QSZZ	AK	EB	N	D	Install guide [Japan] インストールガイド
	TCADZ0369QSZZ	AH	DX	N	D	NWS utility manual [U.S.A,Canada] NWS ユティリティ説明書
8	SPAKA399ACCZZ	AB	DD		D	Vinyl bag ホリ袋
11	SPAKA0559QSZZ	AD	DJ		D	Packing add スリーブ
101	LHLDW2133SCZZ	AC	DD		D	Clamp クランプ
102	TCADH0213QSZZ	AE	DJ		D	Card [Japan] ユーザーガイド補足説明書
103	TCADU0308QSZZ	AL	EB		D	Inst.card [Japan] E-TYPIST ユーザー登録カード
104	RCORF0006QSZZ	AL	EB		C	Core コア

2 梱包 & 付属品 (Packing material & Accessories)



PRP02412

3 ネットワーク基板 (Network PWB unit)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION
		Ex.	Ja.			
1	PCOVPO100QSZZ	AC	DJ		D	Battery cover バッテリーカバー
2	QCNCM0097QSPZ	AC	DJ		C	Connector(T4B-SQ) [CN6] コネクター
5	QJAKC0006QSZZ	AE	DS		C	PS jack(HEC3610-010010) [PJ1] 電源ジャック
6	QSOCN0010QSPZ	AT	EZ		C	Socket(J0026D21GNL) [CN8] ソケット
7	QSOCN0012QSPZ	AE	DS		C	Socket(UAR27-4K5J00) [CN9] ソケット
8	QSOCZ0013QSPZ	AQ	EQ		C	Socket(DM-3B1-N1210) [CN2] ソケット
9	QSOCZ0079FCPZ	AP	EQ		C	Socket(DMM-100G-133FNK31-F) [Japan][CN5] ソケット
10	QSOCZ0094FCPA	AL	EB		C	Socket(DMM2-SD72AR-113-F) [CN4,CN3] ソケット
11	QSOCZ2331RCZZ	AM	EG		C	Socket(HL32-V1) [BT1] ソケット
12	QSW-Q0018QSZZ	AE	DJ		B	Tact switch(SKHHLUA010) [SW1] タクトスイッチ
13	RC-EZ0023QCPZ	AC	DD		C	Capacitor(16WV 22μF) [C75,C211,C212,C213] コンデンサー
14	RC-EZ0024QCPZ	AC	DD		C	Capacitor(10WV 220μF) [C152,C190,C192] コンデンサー
15	RC-EZ0025QCPZ	AC	DD		C	Capacitor(16WV 47μF) [C180,C200] コンデンサー
16	RC-EZ0026QCPZ	AD	DJ		C	Capacitor(16WV 470μF) [C186,C184] コンデンサー
17	RC-EZ0027QCPZ	AB	DD		C	Capacitor(16WV 10μF) [C187] コンデンサー
18	RCILF1097ACZZ	AG	DS		C	Coil(DLW21SN900SQ2) [L14] コイル
19	RCILP0020QSZZ	AG	DX		C	Indactor(RCH-108-680) [L21,L20] インダクター
20	RCORF1013ACZZ	AD	DJ		C	Core(BLM41PG600S) [L1,L2,L3,L4] ビーズコア
21	RCRSA0085FCPZ	AE	DJ		B	Crystal(DT-38 32.768kHz) [Y1] クリスタル
23	RCRUB0026QSPZ	AW	FG		B	Crystal(SCO10LF-25MHz) [X1] クリスタル
24	RFILN0010QSZZ	AB	DD		C	Coil(BLM18BB121SN1D) [L5,L6,L7,L8] コイル
26	RH-IX0006FCZZ	BB	GD		B	256Mb SDRAM [IC5,IC6] 256Mb SDRAM
27	RMPTR4103ACZZ	AB	DD		B	Block resistor(10KΩ×4) [BR29,BR51,BR53,BR55,BR57] ブロックレジスタ
	RMPTR4103ACZZ	AB	DD		B	Block resistor(10KΩ×4) [BR59,BR61,BR63,BR65] ブロックレジスタ
	RMPTR4330ACZZ	AB	DD		B	Block resistor(33Ω×4) [BR4,BR5,BR6,BR7,BR8] ブロックレジスタ
	RMPTR4330ACZZ	AB	DD		B	Block resistor(33Ω×4) [BR9,BR10,BR11,BR12,BR13] ブロックレジスタ
	RMPTR4330ACZZ	AB	DD		B	Block resistor(33Ω×4) [BR14,BR15,BR16,BR17,BR18] ブロックレジスタ
	RMPTR4330ACZZ	AB	DD		B	Block resistor(33Ω×4) [BR19,BR20,BR21,BR22,BR23] ブロックレジスタ
	RMPTR4330ACZZ	AB	DD		B	Block resistor(33Ω×4) [BR25,BR26,BR28,BR30,BR31] ブロックレジスタ
	RMPTR4330ACZZ	AB	DD		B	Block resistor(33Ω×4) [BR32,BR33,BR35,BR37,BR39] ブロックレジスタ
	RMPTR4330ACZZ	AB	DD		B	Block resistor(33Ω×4) [BR41,BR42,BR43,BR44,BR45] ブロックレジスタ
28	RMPTR4330ACZZ	AB	DD		B	Block resistor(33Ω×4) [BR46,BR47,BR50,BR52,BR54] ブロックレジスタ
	RMPTR4330ACZZ	AB	DD		B	Block resistor(33Ω×4) [BR56,BR58,BR60,BR62,BR64] ブロックレジスタ
	RMPTR4330ACZZ	AB	DD		B	Block resistor(33Ω×4) [BR56,BR58,BR60,BR62,BR64] ブロックレジスタ
	RMPTR4330ACZZ	AB	DD		B	Block resistor(33Ω×4) [BR56,BR58,BR60,BR62,BR64] ブロックレジスタ
	RMPTR4330ACZZ	AB	DD		B	Block resistor(33Ω×4) [BR56,BR58,BR60,BR62,BR64] ブロックレジスタ
	RMPTR4330ACZZ	AB	DD		B	Block resistor(33Ω×4) [BR56,BR58,BR60,BR62,BR64] ブロックレジスタ
	RMPTR4330ACZZ	AB	DD		B	Block resistor(33Ω×4) [BR56,BR58,BR60,BR62,BR64] ブロックレジスタ
	RMPTR4330ACZZ	AB	DD		B	Block resistor(33Ω×4) [BR56,BR58,BR60,BR62,BR64] ブロックレジスタ
	RMPTR4330ACZZ	AB	DD		B	Block resistor(33Ω×4) [BR56,BR58,BR60,BR62,BR64] ブロックレジスタ
29	UBATZ1020ACZZ	AF	DS		B	Battery(CR2032) バッテリー
30	VCCCCZ1HH100D	AA	DD		C	Capacitor(50WV 10pF) [C100,C243,C244] コンデンサー
31	VCCCCZ1HH101J	AA	DD		C	Capacitor(50WV 100pF) [C127,C128,C166] コンデンサー
32	VCCCCZ1HH220J	AA	DD		C	Capacitor(50WV 22pF) [C134,C135,C245,C246] コンデンサー
33	VCCCCZ1HH680J	AA	DD		C	Capacitor(50WV 68pF) [C3] コンデンサー
34	VCKYCY1AB474K	AC	DD		C	Capacitor(6.3WV 0.47μF) [C174,C175,C189,C197,C203] コンデンサー
	VCKYCY1AB474K	AC	DD		C	Capacitor(6.3WV 0.47μF) [C221,C225,C235,C236,C238] コンデンサー
	VCKYCY1AB474K	AC	DD		C	Capacitor(6.3WV 0.47μF) [C239,C240,C241,C242] コンデンサー
35	VCKYCY1CF104Z	AA	DD		C	Capacitor(16WV 0.1μF) [C1,C2,C5,C8,C12] コンデンサー
	VCKYCY1CF104Z	AA	DD		C	Capacitor(16WV 0.1μF) [C13,C14,C15,C16,C17] コンデンサー
	VCKYCY1CF104Z	AA	DD		C	Capacitor(16WV 0.1μF) [C18,C19,C20,C21,C22] コンデンサー
	VCKYCY1CF104Z	AA	DD		C	Capacitor(16WV 0.1μF) [C23,C24,C25,C26,C27] コンデンサー
	VCKYCY1CF104Z	AA	DD		C	Capacitor(16WV 0.1μF) [C28,C29,C30,C31,C32] コンデンサー
	VCKYCY1CF104Z	AA	DD		C	Capacitor(16WV 0.1μF) [C33,C34,C35,C36,C37] コンデンサー
	VCKYCY1CF104Z	AA	DD		C	Capacitor(16WV 0.1μF) [C38,C39,C40,C41,C42] コンデンサー
	VCKYCY1CF104Z	AA	DD		C	Capacitor(16WV 0.1μF) [C43,C44,C45,C46,C47] コンデンサー
	VCKYCY1CF104Z	AA	DD		C	Capacitor(16WV 0.1μF) [C48,C49,C50,C51,C52] コンデンサー
	VCKYCY1CF104Z	AA	DD		C	Capacitor(16WV 0.1μF) [C53,C54,C55,C56,C57] コンデンサー
	VCKYCY1CF104Z	AA	DD		C	Capacitor(16WV 0.1μF) [C58,C59,C60,C61,C62] コンデンサー
	VCKYCY1CF104Z	AA	DD		C	Capacitor(16WV 0.1μF) [C63,C64,C65,C66,C67] コンデンサー
	VCKYCY1CF104Z	AA	DD		C	Capacitor(16WV 0.1μF) [C68,C69,C70,C71,C72] コンデンサー
	VCKYCY1CF104Z	AA	DD		C	Capacitor(16WV 0.1μF) [C73,C74,C76,C77,C78] コンデンサー
	VCKYCY1CF104Z	AA	DD		C	Capacitor(16WV 0.1μF) [C85,C86,C88,C89,C92] コンデンサー
	VCKYCY1CF104Z	AA	DD		C	Capacitor(16WV 0.1μF) [C93,C97,C99,C105,C106] コンデンサー
	VCKYCY1CF104Z	AA	DD		C	Capacitor(16WV 0.1μF) [C109,C120,C122,C125,C130] コンデンサー
	VCKYCY1CF104Z	AA	DD		C	Capacitor(16WV 0.1μF) [C141,C142,C143,C144,C145] コンデンサー
	VCKYCY1CF104Z	AA	DD		C	Capacitor(16WV 0.1μF) [C148,C149,C150,C151,C154] コンデンサー
	VCKYCY1CF104Z	AA	DD		C	Capacitor(16WV 0.1μF) [C159,C165,C170,C173,C176] コンデンサー
	VCKYCY1CF104Z	AA	DD		C	Capacitor(16WV 0.1μF) [C177,C182,C183,C191,C193] コンデンサー
	VCKYCY1CF104Z	AA	DD		C	Capacitor(16WV 0.1μF) [C201,C202,C206,C207,C220,C222] コンデンサー
	VCKYCY1CF104Z	AA	DD		C	Capacitor(16WV 0.1μF) [C223,C224,C226,C233,C234,C247] コンデンサー
36	VCKYCY1HB102K	AA	DD		C	Capacitor(50WV 1000pF) [C6,C7,C102,C104,C108] コンデンサー
	VCKYCY1HB102K	AA	DD		C	Capacitor(50WV 1000pF) [C112,C136,C137,C138,C139] コンデンサー
	VCKYCY1HB102K	AA	DD		C	Capacitor(50WV 1000pF) [C140,C146,C147,C153,C157,C196] コンデンサー
37	VCKYCY1HB471K	AA	DD		C	Capacitor(50WV 470pF) [C121,C205,C219] コンデンサー
38	VCKYCY1HF103Z	AA	DD		C	Capacitor(50WV 0.01μF) [C96,C98,C101,C103,C107] コンデンサー
	VCKYCY1HF103Z	AA	DD		C	Capacitor(50WV 0.01μF) [C110,C111,C113,C114,C115] コンデンサー
	VCKYCY1HF103Z	AA	DD		C	Capacitor(50WV 0.01μF) [C116,C117,C118,C119,C126] コンデンサー
	VCKYCY1HF103Z	AA	DD		C	Capacitor(50WV 0.01μF) [C129,C155,C188] コンデンサー
39	VCKYTQ1AF106Z	AD	DD		C	Capacitor(10WV 10μF) [C4,C9,C79,C87,C90] コンデンサー
	VCKYTQ1AF106Z	AD	DD		C	Capacitor(10WV 10μF) [C91,C123,C124,C131,C156] コンデンサー
	VCKYTQ1AF106Z	AD	DD		C	Capacitor(10WV 10μF) [C158,C164,C204,C208,C209] コンデンサー
	VCKYTQ1AF106Z	AD	DD		C	Capacitor(10WV 10μF) [C210,C214,C215,C216,C217] コンデンサー
40	VHD1SS355/-1	AB	DJ		B	Diode(1SS355) ダイオード

3 ネットワーク基板 (Network PWB unit)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION
		Ex.	Ja.			
41	VHDD1FM3706-1	AD	DJ		B	Diode(D1FM3-7063) [D14,D15] ダイ-ド
42	VHDRB451F//--1	AD	DS		B	Diode(RB451F) [D6] ダイ-ド
43	VHDRB751V40-1	AD	DJ		B	Diode(RB751V-40) [D1] ダイ-ド
44	VHi24F256Xi-1	AP	EQ		B	IC(CAT24FC256XI-TE13) [IC17] IC
45	VHi74LCX08FT1	AF	DS		B	IC(74LCX08FT1) [IC36] IC
46	VHi74LCX14FT1	AF	DS		B	IC(74LCX14FT1) [IC3,IC25,IC29,IC38] IC
47	VHi74LCX244FT	AH	DX		B	IC(TC74LCX244) [IC7,IC8,IC9] IC
48	VHi74LCX245FT	AH	DX		B	IC(74LCX245FT) [IC11,IC12,IC13,IC14] IC
50	VHi93C46Vi+-1	AE	DS		B	IC(CAT93C46VI-TE13) [IC20] IC
52	VHiBD6513F+-1	AN	EQ	N	B	IC(BD6513F-E2) [IC23] IC
53	VHiDP83816N-1	AY	FQ		B	IC(DP83816AVNG-NOPB) [IC19] IC
55	VHiLCX373FT-1	AL	EB		B	IC(TC74LCX373FT) [IC10] IC
56	VHiMD3221N+-1	AV	FG		B	IC(MD3221N) [IC27] IC
57	VHiNJ2360AM-1	AG	DX		B	IC(NJM2360AM) [IC31] IC
58	VHiNJ6356LF-1	AH	DX		B	IC(NJU6356EM) [IC18] IC
59	VHiPT598CLF-1	AF	DS		B	IC(PST598CN) [IC24] IC
62	VHPLL155GLF-1	AD	DJ		B	LED(LL155GL) [D7,D4] LED
63	VHPLT1P67A+-1	AC	DJ		B	LED(LT1P67A) [D2] LED
64	VRSCY1JR49R9F	AA	DD		C	Resistor(1/16W 49.9Ω ±1%) [R128,R130] ｱｲﾊﾞﾂ
65	VRSCY1JR54R9F	AA	DD		C	Resistor(1/16W 54.9Ω ±1%) [R132,R135] ｱｲﾊﾞﾂ
66	VRS-CZ1JD000J	AA	DD		C	Resistor(1/16W 0Ω ±5%) [R88,R89,R107,R129,R131] ｱｲﾊﾞﾂ
	VRS-CZ1JD000J	AA	DD		C	Resistor(1/16W 0Ω ±5%) [R136,R138,R140,R147,R167] ｱｲﾊﾞﾂ
	VRS-CZ1JD000J	AA	DD		C	Resistor(1/16W 0Ω ±5%) [R168,R204,R213,R279,R281,R283] ｱｲﾊﾞﾂ
67	VRS-CZ1JD100J	AA	DD		C	Resistor(1/16W 10Ω ±5%) [R45,R70,R71,R72,R73] ｱｲﾊﾞﾂ
	VRS-CZ1JD100J	AA	DD		C	Resistor(1/16W 10Ω ±5%) [R74,R75,R76,R77,R121] ｱｲﾊﾞﾂ
	VRS-CZ1JD100J	AA	DD		C	Resistor(1/16W 10Ω ±5%) [R126,R134,R157,R218] ｱｲﾊﾞﾂ
68	VRS-CZ1JD102J	AA	DD		C	Resistor(1/16W 1.0KΩ ±5%) [R14,R22,R24,R247,R248] ｱｲﾊﾞﾂ
	VRS-CZ1JD102J	AA	DD		C	Resistor(1/16W 1.0KΩ ±5%) [R249,R287,R294,R296,R297] ｱｲﾊﾞﾂ
69	VRS-CZ1JD103F	AA	DD		C	Resistor(1/16W 10KΩ ±1%) [R142] ｱｲﾊﾞﾂ
70	VRS-CZ1JD103J	AA	DD		C	Resistor(1/16W 10KΩ ±5%) [R15,R17,R33,R34,R35] ｱｲﾊﾞﾂ
	VRS-CZ1JD103J	AA	DD		C	Resistor(1/16W 10KΩ ±5%) [R36,R37,R87,R106,R109] ｱｲﾊﾞﾂ
	VRS-CZ1JD103J	AA	DD		C	Resistor(1/16W 10KΩ ±5%) [R123,R124,R144,R145,R148] ｱｲﾊﾞﾂ
	VRS-CZ1JD103J	AA	DD		C	Resistor(1/16W 10KΩ ±5%) [R153,R154,R164,R172,R173] ｱｲﾊﾞﾂ
	VRS-CZ1JD103J	AA	DD		C	Resistor(1/16W 10KΩ ±5%) [R175,R187,R189,R194,R211] ｱｲﾊﾞﾂ
	VRS-CZ1JD103J	AA	DD		C	Resistor(1/16W 10KΩ ±5%) [R220,R221,R246,R260,R269] ｱｲﾊﾞﾂ
	VRS-CZ1JD103J	AA	DD		C	Resistor(1/16W 10KΩ ±5%) [R270,R285,R286,R299,R300] ｱｲﾊﾞﾂ
	VRS-CZ1JD103J	AA	DD		C	Resistor(1/16W 10KΩ ±5%) [R301,R303,R305,R306,R307,R308] ｱｲﾊﾞﾂ
71	VRS-CZ1JD121J	AA	DD		C	Resistor(1/16W 120Ω ±5%) [R96] ｱｲﾊﾞﾂ
72	VRS-CZ1JD123F	AA	DD		C	Resistor(1/16W 12KΩ ±1%) [R169,R199] ｱｲﾊﾞﾂ
73	VRS-CZ1JD153J	AA	DD		C	Resistor(1/16W 15KΩ ±5%) [R177,R178] ｱｲﾊﾞﾂ
74	VRS-CZ1JD221J	AA	DD		C	Resistor(1/16W 220Ω ±5%) [R191,R192,R193,R195] ｱｲﾊﾞﾂ
75	VRS-CZ1JD222J	AA	DD		C	Resistor(1/16W 2.2KΩ ±5%) [R125] ｱｲﾊﾞﾂ
76	VRS-CZ1JD302F	AA	DD		C	Resistor(1/16W 3KΩ ±1%) [R198] ｱｲﾊﾞﾂ
77	VRS-CZ1JD330J	AA	DD		C	Resistor(1/16W 33Ω ±5%) [R16,R46,R47,R49,R50] ｱｲﾊﾞﾂ
	VRS-CZ1JD330J	AA	DD		C	Resistor(1/16W 33Ω ±5%) [R53,R54,R55,R59] ｱｲﾊﾞﾂ
	VRS-CZ1JD330J	AA	DD		C	Resistor(1/16W 33Ω ±5%) [R60,R61,R62,R63,R64] ｱｲﾊﾞﾂ
	VRS-CZ1JD330J	AA	DD		C	Resistor(1/16W 33Ω ±5%) [R65,R66,R67,R69,R86] ｱｲﾊﾞﾂ
	VRS-CZ1JD330J	AA	DD		C	Resistor(1/16W 33Ω ±5%) [R97,R98,R99,R100,R201] ｱｲﾊﾞﾂ
	VRS-CZ1JD330J	AA	DD		C	Resistor(1/16W 33Ω ±5%) [R202,R208,R209,R210,R219] ｱｲﾊﾞﾂ
	VRS-CZ1JD330J	AA	DD		C	Resistor(1/16W 33Ω ±5%) [R230,R231,R232,R233,R234] ｱｲﾊﾞﾂ
	VRS-CZ1JD330J	AA	DD		C	Resistor(1/16W 33Ω ±5%) [R235,R236,R237,R238,R239] ｱｲﾊﾞﾂ
	VRS-CZ1JD330J	AA	DD		C	Resistor(1/16W 33Ω ±5%) [R240,R241,R242,R243,R244] ｱｲﾊﾞﾂ
	VRS-CZ1JD330J	AA	DD		C	Resistor(1/16W 33Ω ±5%) [R245,R288,R289,R290,R291] ｱｲﾊﾞﾂ
78	VRS-CZ1JD330J	AA	DD		C	Resistor(1/16W 33Ω ±5%) [R292,R293] ｱｲﾊﾞﾂ
	VRS-CZ1JD332J	AA	DD		C	Resistor(1/16W 3.3KΩ ±5%) [R122] ｱｲﾊﾞﾂ
79	VRS-CZ1JD363J	AA	DD		C	Resistor(1/16W 36KΩ ±5%) [R188] ｱｲﾊﾞﾂ
80	VRS-CZ1JD470J	AA	DD		C	Resistor(1/16W 47Ω ±5%) [R51,R52] ｱｲﾊﾞﾂ
81	VRS-CZ1JD471J	AA	DD		C	Resistor(1/16W 470Ω ±5%) [R139,R141] ｱｲﾊﾞﾂ
82	VRS-CZ1JD472J	AA	DD		C	Resistor(1/16W 4.7KΩ ±5%) [R38,R40,R41,R42,R56] ｱｲﾊﾞﾂ
	VRS-CZ1JD472J	AA	DD		C	Resistor(1/16W 4.7KΩ ±5%) [R57,R58,R151,R152] ｱｲﾊﾞﾂ
83	VRS-CZ1JD560J	AA	DD		C	Resistor(1/16W 56Ω ±5%) [R90,R91,R94,R95] ｱｲﾊﾞﾂ
84	VRS-CZ1JD561J	AA	DD		C	Resistor(1/16W 560Ω ±5%) [R174,R184,R206] ｱｲﾊﾞﾂ
85	VRS-CZ1JD820J	AA	DD		C	Resistor(1/16W 82Ω ±5%) [R48] ｱｲﾊﾞﾂ
86	VRS-CZ1JD822J	AA	DD		C	Resistor(1/16W 8.2KΩ ±5%) [R18,R19,R20,R78,R79] ｱｲﾊﾞﾂ
	VRS-CZ1JD822J	AA	DD		C	Resistor(1/16W 8.2KΩ ±5%) [R80,R81,R82,R83,R84,R85] ｱｲﾊﾞﾂ
87	VRS-TS2AD104F	AA	DD		C	Resistor(1/10W 100KΩ ±1%) [R200] ｱｲﾊﾞﾂ
	(Unit)					
901	CPWBX0157RS55	CD	UD	N	E	Network PWB [Japan] ネットワーク基板
	CPWBX0157RS56	CC	TZ	N	E	Network PWB [Except Japan] ネットワーク基板

■ 索引 (Index)

PARTS CODE	NO.	PRICE R.		NEW	P/R	
		Ex.	Ja.			
{C}						
CDSKA0073QS31	2- 3	BH	GX	N	D	
CDSKA0074QS31	2- 3	BB	GD	N	D	
CDSKA0075QS31	2- 3	BH	GX	N	D	
CDSKA0076QS31	2- 3	BH	GX	N	D	
CDSKA0077QS31	2- 3	BB	GD	N	D	
CDSKA0079QS31	2- 3	BB	GD	N	D	
CPWBX0157RS55	1- 8	CD	UD	N	E	
"	3-901	CD	UD	N	E	
CPWBX0157RS56	1- 8	CC	TZ	N	E	
"	3-901	CC	TZ	N	E	
{D}						
DHA i -0433QSZZ	1- 6	AW	FG		C	
DHA i -0450QSZZ	1- 6	AK	DX		C	
{L}						
LBNDJ0003QSZZ	1- 3	AD	DJ		C	
LBNDJ0013FCZ1	1- 11	AE	DJ		C	
LBNDJ0043FCZ1	1- 4	AA	DJ		C	
LFRM-0073QSZ1	1- 9	AQ	EQ	N		
LHLDW2133SCZZ	2-101	AC	DD		D	
LPLTM0358QSZZ	1- 7	AK	DX		C	
{P}						
PCOVP0099QSZ3	1- 1	AT	EZ	N	C	
PCOVP0100QSZZ	3- 1	AC	DJ		D	
{Q}						
QCNCM0097QSPZ	3- 2	AC	DJ		C	
QCNWG0012QSZZ	2- 1	AP	EQ	N	C	
QJAKC0006QSZZ	3- 5	AE	DS		C	
QSOCN0010QSPZ	3- 6	AT	EZ		C	
QSOCN0012QSPZ	3- 7	AE	DS		C	
QSOCZ0013QSPZ	3- 8	AQ	EQ		C	
QSOCZ0079FCPZ	3- 9	AP	EQ		C	
QSOCZ0094FCPA	3- 10	AL	EB		C	
QSOCZ2331RCZZ	3- 11	AM	EG		C	
QSW-Q0018QSZZ	3- 12	AE	DJ		B	
{R}						
RADPA0008QSZZ	1- 5	BD	GN		B	
RC-EZ0023QCPZ	3- 13	AC	DD		C	
RC-EZ0024QCPZ	3- 14	AC	DD		C	
RC-EZ0025QCPZ	3- 15	AC	DD		C	
RC-EZ0026QCPZ	3- 16	AD	DJ		C	
RC-EZ0027QCPZ	3- 17	AB	DD		C	
RC i LF1097ACZZ	3- 18	AG	DS		C	
RC i LP0020QSZZ	3- 19	AG	DX		C	
RCORF0006QSZZ	2-104	AL	EB		C	
RCORF1013ACZZ	3- 20	AD	DJ		C	
RCRSA0085FCPZ	3- 21	AE	DJ		B	
RCRUB0026QSPZ	3- 23	AW	FG		B	
RF i LN0010QSZZ	3- 24	AB	DD		C	
RH- i X0006FCZZ	3- 26	BB	GD		B	
RMPTR4103ACZZ	3- 27	AB	DD		B	
RMPTR4330ACZZ	3- 28	AB	DD		B	
{S}						
SPAKA0559QSZZ	2- 11	AD	DJ		D	
SPAKA399ACCZZ	2- 8	AB	DD		D	
SSAKA0005WCZZ	2- 4	AA	DD		D	
SSAKA0006UCZZ	2- 5	AA	DD		D	
{T}						
TCADH0213QSZZ	2-102	AE	DJ		D	
TCADU0308QSZZ	2-103	AL	EB		D	
TCADZ0367QSZZ	2- 2	AE	DJ	N	D	
TCADZ0368QSZZ	2- 7	AK	EB	N	D	
TCADZ0369QSZZ	2- 7	AH	DX	N	D	
{U}						
UBATZ1020ACZZ	3- 29	AF	DS		B	
{V}						
VCCCCZ1HH100D	3- 30	AA	DD		C	
VCCCCZ1HH101J	3- 31	AA	DD		C	
VCCCCZ1HH220J	3- 32	AA	DD		C	
VCCCCZ1HH680J	3- 33	AA	DD		C	
VCKYCY1AB474K	3- 34	AC	DD		C	
VCKYCY1CF104Z	3- 35	AA	DD		C	
VCKYCY1HB102K	3- 36	AA	DD		C	
VCKYCY1HB471K	3- 37	AA	DD		C	
VCKYCY1HF103Z	3- 38	AA	DD		C	
VCKYQ1AF106Z	3- 39	AD	DD		C	
VHD1SS355/-1	3- 40	AB	DJ		B	
VHDD1FM3706-1	3- 41	AD	DJ		B	
VHDBR451F/-1	3- 42	AD	DS		B	

[illegible]

CAUTION FOR BATTERY REPLACEMENT

- (Danish) ADVARSEL !
Lithiumbatteri - Eksplosionsfare ved fejlagtig håndtering.
Udskiftning må kun ske med batteri
af samme fabrikat og type.
Levér det brugte batteri tilbage til leverandoren.
- (English) Caution !
Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type
recommended by the manufacturer.
Dispose of used batteries according to manufacturer's instructions.
- (Finnish) VAROITUS
Paristo voi räjähtää, jos se on virheellisesti asennettu.
Vaihda paristo ainoastaan laitevalmistajan suosittelemaan
tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden
mukaisesti.
- (French) ATTENTION
Il y a danger d'explosion s'il y a remplacement incorrect
de la batterie. Remplacer uniquement avec une batterie du
même type ou d'un type équivalent recommandé par
le constructeur.
Mettre au rebut les batteries usagées conformément aux
instructions du fabricant.
- (Swedish) VARNING
Explosionsfara vid felaktigt batteribyte.
Använd samma batterityp eller en ekvivalent
typ som rekommenderas av apparatillverkaren.
Kassera använt batteri enligt fabrikantens
Instruktion.
- (German) Achtung
Explosionsgefahr bei Verwendung inkorrektter Batterien.
Als Ersatzbatterien dürfen nur Batterien vom gleichen Typ oder
vom Hersteller empfohlene Batterien verwendet werden.
Entsorgung der gebrauchten Batterien nur nach den vom
Hersteller angegebenen Anweisungen.

CAUTION FOR BATTERY DISPOSAL

(For USA,CANADA)

"BATTERY DISPOSAL"
THIS PRODUCT CONTAINS A LITHIUM PRIMARY
(MANGANESE DIOXIDE) MEMORY BACK-UP BATTERY
THAT MUST BE DISPOSED OF PROPERLY. REMOVE THE
BATTERY FROM THE PRODUCT AND CONTACT YOUR
LOCAL ENVIRONMENTAL AGENCIES FOR INFORMATION
ON RECYCLING AND DISPOSAL OPTIONS.

"TRAITEMENT DES PILES USAGÉES"
CE PRODUIT CONTIENT UNE PILE DE SAUVEGARDE DE
MÉMOIRE LITHIUM PRIMAIRE (DIOXYDE DE MANGANESE)
QUI DOIT ÊTRE TRAITÉE CORRECTEMENT. ENLEVEZ LA
PILE DU PRODUIT ET PRENEZ CONTACT AVEC VOTRE
AGENCE ENVIRONNEMENTALE LOCALE POUR DES
INFORMATIONS SUR LES MÉTHODES DE RECYCLAGE ET
DE TRAITEMENT.

SHARP

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